MEANINGS THAT EXTRA CARE TENANTS ATTRIBUTE TO USING THE INTERNET FOR SOCIAL CONTACT: A PHENOMENOLOGICAL STUDY

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Abstract

Social connectedness is one of the key determinants of quality of life in later years, with good social networks enhancing resilience to challenging life events. Older adults may respond to health concerns and changing circumstances, by relocating from life in the community, to an extra care housing scheme. A life transition, such as a housing relocation, may lead to the disruption of social networks, with the attendant risk of loneliness, social isolation and health detriments. With the ubiquity of digital devices, online social contact may enable extra care tenants to maintain their social networks, after a transition from life in the community. However, little is known about extra care tenants' lived experience of social internet use. This interpretative, hermeneutic, phenomenological inquiry explored the experiences of ten extra care tenants, adopting online social contact, in two extra care housing schemes in north east England. Data collection involved participants in a series of three semi-structured interviews, over a period of eight months. This was supplemented by solicited diaries, kept for two weeks, with participants recording their use of technology for social contact. The longitudinal design of the study enabled a prolonged engagement with the participants and captured their evolving experience of online social contact. Participants found that social internet use supported their offline social relationships, enabling them to maintain their familial roles and long term friendships, after a transition to extra care housing. Additionally, dormant friendships were rekindled online and some new friendships developed. Participants found that their social internet use enabled them to re-establish a continuous sense of their own biography and regain some skills from their earlier years. Drawing on theories of ageing and adaptation, to illuminate the participants' experience, existing theory was extended and repurposed, for application in the internet age.

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Acknowledgements

My interest in extra care tenants' social internet use stems from eighteen years' experience as an Information and Communications Technology (ICT) tutor. I taught in community venues and supported housing schemes, across north east England, with learners aged sixty-five years and over, being the predominant demographic. Many learners were newcomers to computing and anticipated using the internet for contact with family and friends. As their tutor, I observed their progress and often their delight at sending and receiving their first emails. These online exchanges sparked my interest and I wanted to know more about the meaning of online social contact for these older individuals. Their focus and determination was an inspiration to undertake this inquiry.

I would like to thank the ten extra care tenants who participated in this study. I am grateful for the way you welcomed me into your housing scheme and shared your online experiences with me. Your contributions were fundamental to the completion of this research. Thank you, also, to the managers of the two Extra Care Housing Schemes where this inquiry took place, for providing me with access to the research sites, assistance with establishing the computer groups and facilitating the recruitment of participants for the study. I am also indebted to the volunteers and assistant tutors, who were integral to the computer groups and supported the participants on their learning journey.

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Finally, I would like to thank my family, friends and colleagues whose interest and encouragement has supported me through the years of study.

Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others.

Any ethical clearance for the research presented in this thesis has been approved. Approval was sought and granted by the Faculty Ethics Committee on 28.11.11. Amended proposal approved 17.7.13.

I declare that the Word Count of this Thesis is 79,725 words.

Name: Jill Wales

Signature:

Date: 22.10.20

Chapter 1 – Introduction

Social connectedness is a key indicator of quality of life in older age (Victor & Bowling, 2012; Cattan *et al*., 2005) and good social networks can support resilience to challenging life events (Blane *et al*., 2011; Fuller-Iglesias *et al*., 2008). As we age, challenges can become more frequent and deteriorating health, sensory losses or the loss of a partner can increase vulnerability in older individuals. This may lead to a transition from life in the community to the more supported environment of an extra care housing scheme. The upheaval associated with a move to extra care housing can disrupt established routines, friendships can break down and loneliness may ensue. In this context, it becomes important to maintain, re-establish and develop new social connections. Some internet applications may have the potential to support extra care tenants' social relationships. However, the ways in which online social contact could enhance extra care tenants' social relationships are unknown.

Extra care housing was introduced in the UK, in the 1990s, and was subsequently promoted by government as a new concept in housing for older people (Department of Health, 2003a). It offers older individuals safety and security in a communal housing environment. The extra care ethos is to promote older people's independence, while supporting them with on-site care, domestic assistance and opportunities to socialise with other tenants (Callaghan *et al*., 2009). With a transition to extra care housing, older individuals can feel released from some of the responsibilities of daily living but may experience a loss of self-confidence and a disjuncture with the social networks of their former life.

The support of family and friends may facilitate the transition to extra care housing. However, geographical distance, poorer health or loss of mobility can make it difficult for extra care tenants to maintain the continuity of their social relationships. Damant and Knapp (2015) have suggested that using the internet for social contact may help to bridge geographical distance between older adults and their social networks. This approach may be beneficial where older individuals have internet access and

appropriate digital skills. However, research (Dickinson *et al.,* 2005; Damant & Knapp, 2015; Office for National Statistics, 2018) has indicated that the digital skills of some older adults are limited and the infrastructure for internet access is not available in some extra care housing schemes.

As an ICT tutor, recognising a gap in digital skills, among extra care tenants, I established computer groups in three extra care housing schemes in North East England. Tenants at two locations subsequently participated in this inquiry. Extra care tenants who attended these computer groups, developed their digital skills and approximately forty tenants, across the three extra care housing schemes, subsequently completed introductory Information and Communications Technology (ICT) courses. They learned to send and receive emails, carry out internet searches, and to use word processing applications. In the absence of an onsite internet connection, they borrowed my mobile Wi-Fi connection to access the internet. Social contact over the internet was their primary focus. Some tenants continued to attend these computer groups, for several years after their initial training was complete, consolidating their learning and acquiring additional online communication skills. Establishing the extra care tenants' motivations and understanding their experience of online social contact is central to this inquiry.

The significance of social contact for extra care tenants

A connection has been identified, in the research literature, between loneliness and social isolation, ill-health and cognitive decline in older age (Cacioppo *et al*., 2006; Holt-Lunstad & Smith, 2016; Zhong *et al*., 2017; Hanratty *et al*., 2018). Together, these factors have a significant impact on the quality of life that an individual experiences in later years. This inquiry emanates from a complex background, where the benefits of maintaining an older individual's friendships are juxtaposed with the difficulties of supporting the individual's social networks after a transition to extra care housing. In a UK based comparative study of social resources and loneliness, within extra care housing, residential care homes and sheltered housing in the community, Burholt *et al.,* (2013) found the emotional satisfaction derived from long-established friendships was often greater

than the satisfaction gained from interactions with new friends and acquaintances in communal housing schemes. It was noted that extra care housing can provide opportunities for social interaction between tenants (Twyford, 2018; Gray & Worlledge, 2018; Mullins, 2015; Burholt *et al*., 2013; Netten *et al*., 2011; Bäumker *et al*., 2010). However, extra care tenants reported that interactions with new neighbours, in their extra care housing scheme, could feel superficial and unsatisfying when compared with their friendships in the community which had developed over many years. Mullins (2015) noted the significance of maintaining strong community links, to support tenants' long-term relationships in the community. Gray and Worlledge, (2018) also suggested that ICT may provide a means of maintaining extra care tenants' social relationships.

Internet use within retirement communities and nursing homes

Burholt *et al.,* (2013) cited three studies of ICT use, by residents of nursing homes and retirement communities, overseas, to indicate how ICT may be beneficial to older residents (White *et al.,* 1999; Groves & Slack, 1994; Tsai *et al.,* 2010). White *et al.,* (1999) addressed the social impact of ICT use by older residents of retirement communities while Groves and Slack (1994) considered the impact of computer instruction and use on the quality of life for nursing home residents. Both studies took place in the USA. Tsai *et al.,* (2010) considered the use of videoconferencing by residents in a Taiwanese retirement community. These studies showed positive outcomes for participants, with trends towards reduced loneliness, reduced depression and some transfer of physical skills to other activities. Tsai *et al*., (2010) advised that videoconferencing may be appropriate for wider use among residents of long-term care institutions.

These studies are of interest but were completed overseas in settings that differed in nature from extra care housing. With its emphasis on fostering independence, self-reliance and each tenant controlling 'their own front door,' extra care housing provides a service that differs from nursing homes and retirement communities. Nonetheless, the studies cited by Burholt *et al.,* (2013) raise the possibility that ICT may provide a means of supporting the long-term relationships of extra care tenants in the UK.

Damant and Knapp (2015), however, noted the limited availability of internet access for older individuals, living in residential care homes, in the UK. This is significant, as the lack of an internet connection removes the opportunity for care home residents to use ICT to support their social relationships. Equivalent research, on internet access in extra care housing, has not been found and the absence of this data suggests that extra care tenants' access to the internet, is not seen as a priority for society at large. However, extra care tenants represent a significant cohort within the older population and this inquiry provides an opportunity to explore the meanings of online social contact, in the context of daily life as an extra care tenant.

The meaning of online social contact for extra care tenants

Damant and Knapp (2015) indicate that while the internet may be a means of maintaining social relationships in older age, little is known about the actual use of the internet by cohorts of older adults. Matthews and Nazroo (2015) posit that internet use may benefit mental health in older age but advise that further research is required. Extra care tenants form a heterogeneous cohort of older individuals. The majority are over fifty five years of age and live in *'developments that comprise self-contained homes with design features and support services available to enable self-care and independent living'* (https://www.housinglin.org.uk/Topics/browse/HousingExtraCare/what-is-extra-care/ Accessed: 9 September 2019) Extra care housing takes many forms and the needs and personal biographies of extra care tenants also vary widely, but the voices of extra care tenants are rarely heard by the wider population. Little is known about their experience of transition from life in the community, the challenges they face in using the internet and the meanings they attribute to online social contact. This suggests that their experience of using the internet for social contact may have been overlooked or 'taken for granted.' This inquiry addresses the meaning of online social contact, for extra care tenants, as they understand it themselves.

Motivation to undertake the study

Personal background – early computing experience

I teach basic computing skills to older people and my interest in computing stems from the purchase of a Sinclair ZX81 low cost, home computer, in the 1980s. The device, which retailed at £49.95 came in the form of a self-assembly kit. It required a TV set for output, with programs and data stored on audio tape cassettes. These early devices pre-dated the introduction of the user-friendly graphical interfaces subsequently adopted by Microsoft Corporation and Apple Inc. The devices also predated public access to the internet. My recollection of using the Sinclair ZX81 was with a sense of entering uncharted territory and complex feelings of anticipation and concern. This early experience as a computer user, firstly with the Sinclair ZX81 and, later, with successor devices, enabled me to acquire some basic computer skills as an early adopter. In these circumstances, peer pressure to demonstrate competence with the device was minimal.

For older learners developing their computing and internet skills, at the present time, the situation is more complex. Digital devices have proliferated and there is an expectation of at least a basic level of competence with these devices in the general population (HM Government, Cabinet Office, 2013). Concurrently, the aftermath of the Financial Crisis of 2008-9 witnessed a reduction in public expenditure, with the adult education budget reduced by forty percent since 2010. Skills for the workplace were prioritised and fewer community-based internet courses were available. Limited mobility, frailty and sensory losses are not uncommon among extra care tenants and created additional barriers to learning, for those who wished to access the remaining ICT courses in the community.

Professional experience as an Information and Communications Technology (ICT) tutor

My interest in extra care tenants' use of the internet for social contact developed during my eighteen years' experience as an Information and Communications Technology (ICT) tutor, working primarily with older people in north east England. During this period, I taught ICT in

community venues and supported housing complexes, with learners over sixty-five years of age, being the predominant demographic in my computer groups. Many learners were newcomers to computing and anticipated using the internet for familial contact. As their tutor, I often observed their pleasure in their first exchange of emails. One lady, in her late seventies who had hearing difficulties, was learning in a local library. She had advised her son to expect her first email. It contained the message 'Hello 'John', it's your mam.' She was thrilled by his reply 'Hello Mam. How are you?' Their exchange of emails continued and sparked my interest in older adults' experience of online communication. I wanted to know more about the meaning of online social contact for the individuals attending my computer groups. While the learners were enthusiastic, it seemed that the experience of making contact over the internet, could be as significant as the actual content of the communication.

For learners in supported housing schemes, obtaining the infrastructure for internet access could be problematic. One of my computer groups, comprising older tenants living in sheltered bungalows, struggled with an unreliable wi-fi hotspot for internet access. In a nearby extra care housing scheme, the tenants had requested an internet course which I provided using a mobile wi-fi connection. They persevered, although they could only exchange emails with their social contacts once a week.

Damant and Knapp (2015) have contended that internet access is not prioritised in care settings and my experience suggests that this approach also persists in some supported housing environments. However, the low priority given to internet connectivity, by some facilities managers, may not reflect the service users' aspirations. In one scheme where I commenced a programme of training, a manager's assertion that extra care tenants have no interest in using the internet was confounded when significant numbers of tenants enrolled to learn about email. The dichotomy between some tenants' aspirations and their facility managers' perception of their needs, led me to seek a deeper understanding of the meanings that online social contact held for extra care tenants. The sample for this inquiry was drawn from two extra care housing schemes, both

initially offline environments, where I was teaching extra care tenants to use the internet, with a mobile wifi connection.

Research Aim and Objectives

The aim of this study was approached through a series of interconnected objectives. The aim and objectives are presented below:

Aim: To explore the meanings that extra care tenants attribute to using the internet for social contact.

Objectives:

- To explore the extra care tenants' experience of using different forms of ICT based technology for social contact, with particular reference to the participants' perceptions of their own equipment.

- To explore extra care tenants' aspirations for and expectations of online social contact.

- To investigate extra care tenants' experiences and concerns about using the internet for social contact.

- To understand the experience of using the internet for social contact in the context of life as an extra care tenant.

To address the study aim and these objectives, I considered adopting a longitudinal approach to the inquiry. This would provide time to become familiar with the participants and to build sufficient trust with them, to enable them to share their experiences with me. A longitudinal approach would also allow time for the generation of data to reflect any temporal changes in the participants' perceptions of online social contact. Interpretative hermeneutic phenomenology was adopted as the methodology to privilege the participants' voices, and, where helpful, to allow me to draw on my own experience to facilitate understanding. Interpretative phenomenology supports the acquisition of knowledge

through subjective experience and can bring deep issues to the fore. As Lester (1999) contends:

> *Epistemologically, phenomenological approaches are based in a paradigm of personal knowledge and subjectivity and emphasise the importance of personal perspective and interpretation. As such they are powerful for understanding subjective experience, gaining insights into people's motivations and actions, and cutting through the clutter of taken-for-granted assumptions and conventional wisdom. (p1)*

As an experienced ICT tutor, I had observed older people using the internet for a range of purposes and was aware that for the participants, their experiencing of the reality of online social contact may be different from my perception of their experience. I anticipated that adopting a hermeneutic phenomenological approach, would enhance my understanding of this phenomenon.

Structure and organisation of the thesis

Chapter 1 has introduced this inquiry, setting it in the context of extra care housing and outlining my motivations for undertaking the study. The aim and objectives of the study are presented and the methodological approach is outlined. The chapter concludes with an overview of the structure and organisation of the study.

Chapter 2 contains an outline of my preunderstandings of older adults' opportunities for publicly-funded internet training and the extent of internet access in supported housing schemes. My personal and professional experiences as an ICT tutor, which prompted the study, are also indicated.

Chapter 3 contains a review of the policy and research literature which informed and provided a context for this study. A gap in knowledge of extra care tenants' use of the internet for social contact is highlighted in this chapter.

Chapter 4 outlines the research paradigm, methodology and theoretical framework adopted for this study. The selection of the paradigm and methodology is explained. The chapter indicates how the theoretical framework enhances understanding of the emerging data.

Chapter 5 outlines the research methods and explains the study design and recruitment of the sample. Data collection methods are discussed and the approach to data analysis is explained. The study was undertaken at two research sites, with five participants recruited at each location. Data collection took place over a period of sixteen months and my engagement with the participants continued subsequent to data collection, due to my role as the participants' ICT tutor. Research ethics and specific considerations in respect of my dual roles are discussed in this chapter.

Chapters 6, 7 and 8 are the Findings chapters. They present the participants' physical, social and developmental experiences of using the internet for social contact. Chapter 6 focuses on the physical nature of the extra care environment and locates the participants within the research context. In Chapter 7, the participants' perceptions and experience of using the internet for social contact are discussed. Participants' difficulties in establishing an internet connection, peer support groupings and family attitudes to an older relative's uptake of ICT are highlighted. Chapter 8 explores the participants' experience of personal development, emanating from their uptake and use of the internet, within an extra care housing scheme.

Chapter 9 provides a discussion of the findings, in the light of my professional experience, the policy and research literature and the themes of loneliness, social isolation and the introduction of digital management systems in supported housing schemes. The chapter indicates the significance of online social contact for the participants' quality of life and the opportunities it may provide for their self-presentation and self-development. The meanings the participants attribute to online social contact emerge from the discussion.

Chapter 10 concludes the thesis drawing attention to the outcomes of this inquiry and indicating the ways in which participants personalise their internet use, adopting individual strategies to accommodate physical limitations, sensory losses and social needs. Recommendations are made for policy, practice and further research.

Contribution to knowledge

Extra care tenants form a sizeable cohort within the older UK population but are under-researched in terms of their experience of using the internet for social contact. The role of the internet in supporting extra care tenants' social relationships, following a transition from life in the community, is unknown; a gap in knowledge which this thesis begins to address. The perceptions, experiences and concerns of ten extra care tenants were captured as they communicated online, as novice internet users. Using individual strategies and adaptations, the participants learned to communicate with others, on-line, despite disability, sensory impairment and some cognitive issues. The findings illuminate the impact of social internet use on the extra care tenants' social connectedness and their developing sense of themselves as skilled internet users and agentic, autonomous beings, with a place in 'the modern world'. The need to address this gap in knowledge is indicated in the research literature (Damant & Knapp, 2015; Matthews & Nazroo, 2015) and by the remarks of the participants, who articulated the joys, constraints and accommodations they made to enter the digital world. As the study progressed, wider applications for the findings became evident. Social distancing, to control the spread of Coronavirus, has highlighted the role of online social contact, in facilitating familial contact for extra care tenants and residents living in other supported housing schemes, making the need to understand the participants' experience of social internet use more current and pressing.

Chapter 2 – The researcher's foreknowledge of older adults' acquisition of digital skills.

Introduction

The connection between older adults' social relationships and their quality of life was highlighted in the introductory chapter. While social connectedness can impact on health, resilience, cognitive function and longevity (Cacioppo *et al*., 2006; Fuller Iglesias *et al.*, 2008; Holt-Lunstad, 2010; Victor & Bowling, 2012), the use of the internet for social contact is unavailable to the cohort of 4 million adults, in the UK, who are unable to communicate online (ONS 2019). As the researcher and an ICT tutor, I had experience of teaching community dwelling older adults and extra care tenants, to use the internet and brought to this study, some 'foreknowledge' of their acquisition and use of digital skills. My 'foreknowledge' and 'pre-understandings' at the outset of this inquiry are presented in this chapter. The relevance of this foreknowledge, to the methodological approach, is considered in Chapter 4 (pp. 72-73).

Adult education – later life learning – internet skills

My perceptions of adult education were formed between 1999 and 2017 during my professional experience as an ICT tutor. In the early years of the twenty first century, there was a public policy focus on adult education as an enabler of personal advancement and social change. The social and digital inclusion of potentially disadvantaged groups was a priority (ODPM, 2005) and older adults were among the groups considered to be at risk of exclusion (UK Online, 2000; DWP, 2005).The local authority adult education team, where I was employed, engaged with local communities to promote opportunities for learning.

Public funding was made available for ICT training, through local authorities, FE Colleges, charities and community groups. ICT training was popular with older adults (Aldridge & Tuckett, 2007) and teaching opportunities for ICT tutors proliferated from the early 2000s through to 2008. However, a retrenchment followed, with the economic downturn in

2008-9 and programmes of ICT training, for adults outside the workforce, were curtailed. Adults of working age were prioritised and public funding was directed, instead, towards courses leading to qualifications in English, Mathematics and workplace skills. From 2010, the redirection of funding towards apprenticeships and skills for work, became more pronounced, and impacted significantly on older adults' opportunities to access educational programmes, including ICT courses.

Purdie and Bolton-Lewis (2003) indicated that significant social and societal benefits may be derived from older adults' learning in later life. They note that these benefits can be as significant as the particular skills acquired on a course of training. However, addressing changed government priorities, the adult education budget for England was reduced by forty percent between 2010 and 2016 (FE Week, 19.1.17). With the withdrawal of funding from adult education, there were fewer opportunities for older non-users of the internet to acquire digital skills. This closed an avenue whereby some older adults could have learned to communicate online. The social cohesion and opportunities for interaction, created when groups of older adults meet regularly for training, were also lost. There is no indication of a return to the pre-2010 levels of funding, (Tuckett, 2017; FE Week, 17.9.18) and, in 2020, public funding for programmes of ICT training continues to be quite limited. For older adults with little or no experience of using the internet, it has become more difficult to access training in digital skills.

Professional context – the researcher's teaching experience

Between 1999 and 2017, I undertook ICT teaching roles in the north east of England, initially employed by a local authority and subsequently working for a charity and as an independent ICT tutor. In addition to these teaching roles, I was also employed, for seven years, developing learning opportunities with local communities. This involved establishing learning needs with community groups and providing training to address their needs, within the parameters of service funding, funder-led targets and in-house skills. In this role, I became aware of a demand for ICT training among potentially marginalised groups, including older residents of

supported housing schemes. It was not always possible to satisfy the demand for ICT training and my awareness of this unmet need was 'foreknowledge' which I brought to the inquiry.

As a qualified teacher, I initially taught Basic English, Maths and ICT at an adult education centre run by a local authority. From 2001, I focussed on teaching ICT at the centre, working mainly with older learners whose skills ranged from complete beginners through to those studying on Level 2 accredited courses. In 2001, the centre offered at least twenty accredited computer courses, ranging from very basic Entry Level qualifications to Level 2 qualifications in Word Processing, Spreadsheets, Databases, Desktop Publishing, the Internet and Email. Learners could progress through all of these courses, and some older people attended the centre for several years, to achieve Level 2 qualifications in Microsoft Office and internet applications. Funding was available providing the centre could demonstrate that the learners were extending their skills, evidenced by their progression to higher level qualifications. Teaching was in small groups, utilising resources created specifically for older learners. Demand was such that as a part time tutor, in a small market town, I was teaching forty older people per week. Other tutors at the centre had similar numbers of learners.

The impact of the internet on an older adult's wellbeing

In 2010, a member of a community-based computer group which I was teaching, died at the age of eighty-four years. Delivering her eulogy, her son referred to her enthusiasm for using the computer:

> *My mother loved her computer. She never considered herself to be an old lady. She saw herself as a modern woman.*

His mother was a carer for her husband, who was living with dementia and she had few opportunities to socialise. Her son described the way she had used the internet, to maintain her network of friends, despite the constraints of her role as a carer. He referred to his mother's pleasure in *'using such a modern way'* to communicate and her pride, in adopting more advanced social media applications, to communicate with her friends in London.

Although I had taught his mother for three years, I had not appreciated the extent of her use of the internet or its contribution to her social relationships, wellbeing and sense of self. Other learners also voiced complex feelings about online social contact and it became apparent that the meanings older adults attributed to their social internet use was a subject which would merit further study.

Internet use within the UK population

While internet use is increasing in the UK, and, in 2019, 91% of adults self-reported as recent internet users, 7.5% of adults have never used the internet (ONS, 2019). This survey also showed that among adults aged seventy five years and older, only 47% had used the internet within the previous three months. ONS (2019) findings also indicate that among internet using adults aged over seventy five years, 54% of men were recent internet users, while only 41% of women were recent users. ONS (2019) offers no explanation for the gendered difference in older adults' internet use. However, the reasons most commonly cited by older adults, for their non-use of the internet, were that the internet lacked relevance to their own life and they lacked the digital skills required for internet use (Age UK, 2018). This suggests that given the opportunity to acquire digital skills, a cohort of older adults could, potentially, adopt online communications.

Older non-users and lapsed users of the internet

Members of the internet groups which I was teaching, expressed some concern regarding their lack of digital skills. One older adult disclosed her feelings of regret and exclusion, as a non-user of the internet:

> *Most people are on it, aren't they? … and they look at you … if you say, "Well, I haven't got a computer." You know, there's something wrong with you, isn't there?*

However, digital exclusion continues. ONS (2019) has estimated that among the 4 million adults in the UK, who self-reported as never having used the internet, 2.5 million were aged 75 years and older. Lapsed internet users were also more prevalent among older adults with ONS (2019)

noting that adults aged 75 years and older, are more likely than others, to discontinue their internet use.

Although ONS (2019) offers no explanation for older adults' disengagement from the internet, Berkowsky *et al.*, (2015) in a quantitative study of older adults' disengagement from the internet, in the USA, found that increased frailty and participation in offline social activities, were predictors for internet disengagement among supported living dwellers. Selwyn (2004) in a UK-based study, advises that the reasons for disengagement can be multi-faceted and may include the lack of local technical and social support and the absence of a clear application for internet use in older adults' lives. Selwyn's (2004) findings still resonate in 2020 and I have observed that older adults, without local support, can become discouraged and disengage from internet use. Short programmes of ICT training can introduce internet novices, to the digital world. However, these introductory programmes are generally more successful, when followed by a progression course. This enables the learner to consolidate their newly acquired skills. Without an opportunity to consolidate their learning, some older adults lose confidence in their digital skills and their internet use can lapse.

The Get Digital Programme of ICT training for older adults

The psychosocial benefits of enabling older people to communicate online have been well documented (DCMS, 2009a; DCMS, 2009b; DIUS, 2009; Niace, 2012; Age UK, 2013b; Age UK, 2018). In 2010, the drive for digital inclusion led to the implementation of the Get Digital Programme of ICT training. This programme represented a £2 million investment, of public and Lottery funding, in older adults' digital skills. It provided many older adults with an opportunity to access some basic ICT training and to assess the potential role of ICT in their own lives. The programme was rolled out on a broad geographical basis across England. It ran from 2010 to 2011 and offered sheltered housing residents free training in a range of internet-based activities:

> *It was intended to address well-documented low levels of digital technology use among the older population and began from the premise that there are potential benefits for both*

> *individuals and society from supporting older people's digital inclusion. (Niace, 2012. p.11)*

The Get Digital Programme provided computer hardware, software and nine hours of free ICT training for older residents of sheltered housing schemes in England. Nearly three thousand older adults from 196 sheltered housing schemes joined the programme. With a positive response from the target population, it was envisaged, by government, that a second phase of the Get Digital Programme would be funded by local authorities. A review of the completed programme (Niace, 2012) highlighted social benefits to older participants and some limitations in the teaching methods. These included the short teaching programme, the decision to teach learners in small groups, when one to one tuition would have been more appropriate for some learners, and some tutors' unrealistic expectations of the learners' ability to retain new skills. Niace (2012) concluded that further training programmes were required to extend the reach of internet training as widely as possible within the older population. However, the second phase failed to materialise, following cuts to local authority spending after 2010.

Since the completion of the Get Digital Programme, ICT tuition for older adults has become more difficult to access. The computer courses provided by the local authority where I was employed, had increased in cost from an average of £20 per person, per course, in 2009, to over £200 in 2010, with the cost being borne by the learner. The curriculum had changed, in 2010, to address a need for computer skills in the workplace and a more costly ITQ programme was the only computer training available from the local authority. The ITQ programme was free to unemployed learners but older adults, in retirement, were expected to pay the full price. For those with a fixed income or minimum pension, price could be a barrier to participation. Consequently, take-up of the ITQ programme was low among the older demographic.

The search for funding

From 2010 to 2017, I provided basic ICT courses in extra care housing schemes in north east England. Having been approached, in 2010, for a

basic ICT course, for extra care tenants and with no funding available from the local authority, I delivered the course, with support from a local charity. The charity had been established as a support group and fundraiser for the adult education centre where I was employed. Initially, the adult education centre had relied on local supporters, grants and charitable donations, being funded only in part, by the local authority. The charity was run by local councillors, tutors and learners, with support from local businesses and other professionals. When the local authority later took full responsibility for the centre, the charity had a lesser role and over a number of years, support from the local community ebbed away. I initially taught charity-funded ICT courses, in three extra care housing schemes, and, later, established my own organisation, working independently in extra care housing schemes and community venues. The two extra care housing schemes, which became the research locations, were identified in 2013. Neither of the housing schemes provided an internet connection for tenants and I facilitated internet training using a mobile wifi connection.

Preunderstandings of older adults' digital skills acquisition

I had observed that community-dwelling older adults, joining programmes of internet training, would express modest aspirations for their use of digital devices. Anticipating a course of internet training, one older learner commented:

> *Age, deafness and age-related illness will affect the time needed for the course. It's a nice feeling to acquire a little more knowledge but I must admit I'm good at forgetting what I've learned.*

Some older learners voiced an expectation of wider health and social benefits, beyond the acquisition of the specific skills taught on a programme of internet training. While they hoped to '*send and receive emails'* and for '*increased confidence on a computer'*, they also anticipated '*enjoyment', 'health benefits', 'social interaction'* and *'greater self-confidence'* going forward in life. Reflecting later on the experience of internet training, a community-dwelling older adult commented: *'The computer is no longer an enemy'* while others remarked: *'enjoyed every*

minute' 'there is so much to learn.' 'my confidence has improved'. My foreknowledge was that for some community-dwelling older adults, the acquisition of digital skills could be a 'social good' providing opportunities for self-development, health and social benefits. However, for this inquiry, the participants' motivations and the trajectory of their individual development as internet users, remained to be explored.

The contribution of pre-understandings of the research issue

Gadamer (1975) advises that when hermeneutic, interpretative phenomenology is adopted as the methodology for an inquiry, the researcher's 'pre-understandings' can be instrumental in reaching an initial understanding of the research issue. As an experienced ICT tutor, I was able to bring to this inquiry, my 'foreknowledge' of internet training for community-dwelling older adults and my observations of their experience as internet novices. These 'pre-understandings' (pp.72-73) later played a role in the clarification of the participants' written and spoken texts and helped me to appreciate the significance of online social contact for extra care tenants.

Practitioner research and research by a practitioner

In terms of this inquiry, a distinction is made between 'practitioner research' and 'research by a practitioner'. The study is 'research by a practitioner' with the aim of understanding the participants' experience, and differs from 'practitioner research', whereby the aim is often to improve practice, albeit that improved teaching practice may also be an outcome of this study. Hanson (1994) cites Ashworth (1986) who comments on the advantages of 'research by a practitioner', advising that researcher fore-knowledge of the research concern can lead to understandings which other researchers might miss:

> *the 'rich fore understanding' of an insider puts him or her into a good position to do relevant incisive qualitative work. He [Ashworth]notes that the research concern motivates the researcher's work and directs his or her attention to specific elements of the needs under study. Ashworth considers that others might not see the elements (p.941).*

Ashworth's (1986) comments are supportive of my own views, since this inquiry emerged from my interest in the experiences of extra care tenants, learning to communicate over the internet. My 'fore-understanding' of older adults' experience facilitated the study at a number of stages, including the data collection process and subsequent clarification of the data with the participants (pp. 72-73).

Summary

My career as a tutor in adult education commenced in 1999 and initially spanned a period until the late 2000s, when considerable public resources were directed towards the social and digital inclusion of potentially disadvantaged groups, including older adults. Public funding was invested to provide opportunities for older adults to acquire and apply digital skills, to promote their opportunities for work, volunteering, social and civic engagement. However, the retrenchment after the financial crisis of 2008-9, through to the present time (2020), has seen a refocussing of the adult education budget on skills for the workplace. Consequently, opportunities for internet training for adults outside the workforce have been reduced. The issues of older adults' acquisition of digital skills and the significance of extra care tenants' social relationships are considered in more detail in Chapter 3, Literature Review.

Chapter 3 - Literature Review

Introduction

In Chapter 2, my preunderstandings of older adults' experience of ICTs and their opportunities to access appropriate training, were considered in connection with UK government funding priorities. Chapter 3 contains a broader review of the UK social policy and research literature, in relation to extra care housing, older adults' digital skills and the significance of social relationships in older age. The chapter is comprised of three sections. Section 1 provides an overview and discussion of UK social policy frameworks, addressing extra care housing and the broader objective of older adults' social and digital inclusion. Section 2 provides a thematic review of the research literature. It indicates what is known about older adults' social relationships, their access to technology and the social aspects of their internet use. This is considered within the framework of the policy and research literature on extra care housing. In Section 3, a gap in knowledge of extra care tenants' experience of online social contact is identified and discussed.

Section 1. Social policy frameworks relating to this inquiry.

The participants' experience of online social contact is framed by the extra care context in which their housing is provided and their online social interactions are situated. In this section, the development of social policy, as it relates to this research, is traced from the late 1990s through to 2019. The intention is to consider the direction in which social policy, as it relates to older adults' housing, and their social and digital inclusion, has developed during this period and to use the social policy literature as one means of understanding the setting for the participants' experiences. Attention has been given to the policy literature from the early period of extra care housing, as it reflects the context from which the extra care concept emerged.

Social policy frameworks – identifying the literature

The social policy frameworks, with a bearing on this inquiry, relate to several areas of older adults' lives: housing, social relationships, digital skills, health, and education. Electronic and hand searches were carried out to identify relevant public sector, third sector, and quasi-official publications, to indicate the direction of public policy from 1998 to 2019, the period considered in this inquiry. Databases searched included NORA, Cambridge Core, Web of Science, and Google Scholar. Initial searches of the government web portal (GOV.UK), were carried out using search terms derived from the title of the study. Multiple papers were retrieved. Search terms included but were not limited to *extra care tenants (40,368 results), specialist housing (19,584 results), extra care housing (44,581 results), digital skills (30,270 results), social inclusion (34,187)* Search results were further refined, by date and for specificity. The ensuing results were sorted for relevance, initially checking key words, publication type, executive summary or abstract. Relevant papers were saved for detailed analysis.

The focus was then narrowed to retrieve publications from a number of government departments, the Cabinet Office, (CO) the Department of Health, (DOH), the Office of the Deputy Prime Minister, (ODPM), the Department for Culture, Media and Sport, (DCMS) the Department for Business, Innovation and Skills (BIS), the House of Commons, Communities and Local Government Committee (CLGC) and the Department for Work and Pensions, (DWP). Additionally, the website of the national communications regulator (Ofcom) and the National Institute for Adult Continuing Education, (renamed the Learning and Work Institute in 2016) were searched for relevant publications. Academic research can provide evidence of social needs and policy outcomes. Academic policy papers (Barnes *et al.*, 2005; Walker, 2018) and publications from third sector organisations and private limited companies were also reviewed. Annual surveys by the Office for National Statistics (ONS), provided data on older adults' use of the internet. The database of

the Housing Learning and Improvement Network (Housing LIN), a resource for professionals working in the specialist housing sector, was also searched for relevant reports and policy documents. Speeches by government ministers and government press releases were also used to illuminate the emergence of extra care housing and the public policy agenda relating to older adults' social and digital inclusion.

Social policy and extra care housing

The purpose of social policy was explained by Barnes *et al.*, (2005) in a study of older people's social exclusion, for the Office of the Deputy Prime Minister. These authors pointed to the link between social policy and quality of life, quoting Maslow (1968) to support the premise that opportunities for self-actualisation increase, once basic needs have been fulfilled:

> *Implicitly or explicitly, the goal of a great array of social policies is to maximise quality of life…Quality of life is based on a theory that once people have satisfied fundamental needs for the basic requirements of human existence (food, shelter, clothing etc.) they pursue such objectives as self-realisation, happiness and esteem (Maslow, 1968; in ODPM[2], 2005, p54)*

In the context of extra care housing, it can be argued that when the extra care environment leads to the satisfaction of tenants' lower level needs, tenants may then seek to enhance their quality of life, through the achievement of higher level objectives such as social connection, self-esteem and self-development. This would include extra care tenants' pursuance of their social relationships.

The social policy context from which extra care housing emerged, in the late 1990s and early 2000s, prioritised the social inclusion of older people and adults from other potentially marginalised groups (DH, 2004; ODPM, 2005; ODPM 2005[2]). The extra care ethos was to encourage older adults' independence through the provision of accessible housing, on-site care and support, and opportunities for social engagement. It was anticipated that this approach could prolong older adults' independence and delay or obviate their need for residential care. There was also a financial incentive

for government, as extra care housing was considered to be potentially less costly than residential care (Oldman, 2000).

A cost and outcomes evaluation by Bäumker *et al.*, (2011) compared health outcomes for tenants of nineteen extra care housing schemes, from the first round of public funding, with outcomes for matched, comparable entrants into residential care. Health outcomes for extra care tenants were found to be more positive than those for individuals entering residential care, while the cost of extra care provision was similar or lower. Since funding was introduced in 2004, ten rounds of public funding have enabled the provision of extra care housing to continue to develop in the UK (Housing LIN, 2019a) Financial support is continuing, with the current funding round, Department of Health and Care Services (DHCS), Care and Support Specialised Housing (CASSH) Fund, Phase 2 Extension, which runs from 2018-21 (Housing LIN, 2019a). The number of extra care housing units in the UK, in 2019, was approximately 51,000 (Housing LIN, 2019b).

Extra care housing was introduced during the late 1990s by independent housing providers. The Department of Health (2003a) subsequently provided £417 million between 2004 and 2008 through the Extra Care Housing Fund, to encourage innovation in the market for older adults' housing and investment in new construction and the replacement of outdated sheltered housing and residential care homes. The intention was to provide greater choice in the market for older people's housing. The rapid expansion in extra care housing took place in parallel with Personalisation and Social Care Transformation (Department of Health, 2005; HM Government, 2007; Department of Health, 2008, Department of Health, 2010) and other social policy initiatives, designed to enhance autonomy, choice, social inclusion and quality of life for older and disadvantaged adults.

As an innovative concept, extra care housing provided purpose-built, self-contained accommodation, with architectural features to promote tenants' access, mobility and social interaction. Tenants were encouraged to live independently, while domestic support and twenty four hour onsite

personal care were available, if required. Extra care housing differed from residential care, as residents had security of tenure and their own front door. The provision of cooked meals, personal care and round the clock availability of on-site staff, differentiated extra care housing from older people's sheltered accommodation.

Between 2004 and 2006, the Extra Care Housing Fund invested £87 million, in extra care housing on behalf of the Department of Health and by 2006 approximately twenty five thousand units of extra care housing had been established (Care Services Improvement Partnership, no date). Additional rounds of government funding enabled extra care housing to become more widely available (Housing LIN, 2019a). However, despite positive reviews of the health outcomes for extra care tenants and the potential cost savings in comparison with residential and domiciliary care, (Kneale, 2011; Bäumker *et al*., 2010; 2011) in the years from 2006 to 2019, the extra care housing stock has only increased to approximately fifty one thousand units (Housing LIN, 2019). Residential care and extra care housing have been found to accommodate individuals with similar levels of frailty on entry (Oldman, 2000; Bäumker *et al*., 2011). It would seem that the comparatively modest expansion of extra care provision could be considered a missed opportunity, when the 459,385 residential care and nursing home beds (Public Health England, 2019) are compared with the provision of fifty one thousand extra care housing units.

Social Policy frameworks for older adults' wellbeing.

Concurrently with the Department of Health (DH) funding of extra care housing, the Department for Work and Pensions recognised a positive connection between older people's health, social relationships, and their social and civic inclusion, with the publication, 'Opportunity Age' (DWP, 2005). This wide-ranging strategy document aimed to address the challenges of ageing in the 21st century and acknowledged the significance of older adults' social relationships, stating **t**hat *'good social networks and a sense of support' (p.13)* are building blocks to good health in older age. DWP (2005) also promoted the view that older people should play a *'full*

and active role' (p3) in society and their independence and active engagement should be prioritised.

In this respect, extra care housing, which promotes tenants' self-efficacy and independence, may provide a route to the healthy older age envisioned in DWP (2005). While commenting that the primary responsibility for older people's social engagement, lay with the older people themselves, DWP (2005) acknowledged that central and local government should play a supporting role. A long-term strategic approach was proposed, to advance older adults' continued engagement in mainstream activities and to support their learning, civic engagement, volunteering and employment, with the goal of enhancing older adults' health, wellbeing, social connections and independence. The strategy was intended to encourage the upskilling of older individuals and to overcome the perception that the retired population had little to offer to wider society. Within this strategic approach, public funding would be available for adult education, providing opportunities for older adults to extend their skills for employment and maintain their engagement in civic and social society.

While Opportunity Age (DWP, 2005), presented a wide ranging and optimistic approach to older age, the Office of the Deputy Prime Minister (ODPM, 2005[2]) acknowledged that for many older people, the later years of life could be difficult. Older individuals without *'good social networks'* too frequently experienced loneliness (the absence of a spouse, partner or close friends) and social isolation (the lack of a wider social network). In the publication 'Inclusion through Innovation' ODPM (2005) considered the role of ICT in supporting social connections, positing that its potential for enhancing the lives of marginalised older adults should be harnessed:

> *the vital role that ICT can play in transforming the lives of excluded people is overlooked, dismissed or little understood. The Inclusion Through Innovation report sets out to challenge this and shows how ICT can be an enormously powerful tool for transforming not just the lives of the mainstream, but also of those who are on the margins of society. (ODPM, 2005 p.2).*

The loneliness and social isolation experienced by some older adults was acknowledged in the report and the use of technology was proposed to:

repair some of the social 'despair' which can blight old age.' (ODPM, 2005 p.38).

In 2005, ODPM also produced a report on 'The Social Exclusion of Older People' (ODPM, 2005[2]) based on findings from the first wave of the English Longitudinal Study of Ageing (ELSA, 2003). ODPM (2005[2]). This report identified seven dimensions of exclusion and noted that the dimensions of exclusion were linked and more than one dimension of exclusion could be experienced by an individual. The dimensions of social exclusion included social, civic, cultural, lack of basic services, deprived neighbourhood, financial and material exclusion. Multiple exclusion was found to have a negative impact on quality of life in a number of ways:

> *Not surprisingly, there appears to be a connection between multiple exclusion and the quality of life/well-being of older people. Overall quality of life falls as the number of dimensions older people are excluded on increases. The aspects of quality of life defined in terms of self-realisation (optimism, life satisfaction, disposition, energy) appear to be most related to multiple exclusion. Multiply excluded older people are also likely to report a lack of control over their lives. (ODPM, 2005[2] pp.9-10.)*

Digital exclusion was not reported among the seven dimensions of exclusion found by the ODPM (2005[2]) study of older people's social exclusion, although the benefits of digital engagement are highlighted in the ODPM publication, 'Inclusion through Innovation' (2005). This suggests some lack of policy integration within the department. Nonetheless, the direction of public policy, was clearly to address older people's exclusion, in its various forms, and to seek solutions which could include facilitating older people's use of ICT. The policy initiatives of the early to mid-2000s were an attempt to bring together and address the needs of older and potentially marginalised individuals. Phillipson and Scharf (2004), in a literature review, to establish the impact of government policy on social exclusion in later life, found that measures addressing age-based discrimination had been successful, whereas exclusion deriving from cumulative disadvantage and community characteristics was more intractable. They advised that there are significant differences, between

and within groups of socially excluded older adults, and further work would be required to target those who continued to be on the margins of society.

In 2020, the requirement for a national, overarching social policy on older age is still a current issue. In 2011, Blane *et al*. had focussed on the connection between older adults' social relationships and their resilience to adverse events in later life. They argued that government policy should encourage the maintenance of all older adults' social connections, noting that long-lasting social relationships, rather than socio-economic conditions, supported resilience in older age. Walker, (2018) adopted a somewhat different stance, focussing on ageing as a lifelong process and noting the connection between socioeconomic disadvantage throughout life and avoidable chronic conditions in older age. He proposed a life course approach, involving a range of remedial activities to address the impact of adverse socio-economic conditions, anticipating health benefits in later life. He argued that appropriate social policy frameworks could minimise the impact of negative experiences, including poverty, unemployment and poor health, thus reducing the prevalence of chronic conditions in older age. Walker (2018) appears to confirm the difficulty, noted by Phillipson and Scharf (2004), in redressing the effects of cumulative disadvantage and community deprivation, on the experience of older age in disadvantaged communities. Walker (2018) makes no direct reference to the contribution of older adults' social connections to good health and quality of life in older age but notes the benefits of active engagement in the community. He comments that much disability experienced in older age could be avoided or delayed, with the political will to make the necessary policy changes.

Policy frameworks for developing older adults' internet skills.

Within the earlier frameworks for older adults' social and digital inclusion, the lack of computer skills was identified as a significant barrier, by the Office for National Statistics (ONS 2006; 2008; 2009). By 2009, the need for urgent action was also expressed by National Institute for Adult

Continuing Education (Niace, 2009[2]) in a report to the Museums, Libraries and Archives Council:

> *The task of upskilling older people is urgent because new technology moves at such a fast pace that the gap between ship and shore widens daily (p.5).*

Concurrently with the need to upskill older adults in the use of computers, government initiatives also continued to highlight the benefits to health, of remaining socially connected in later life (Dept. of Health, 2011). Thus, the suggestion gained traction that older people may derive health and social benefits from using the internet to maintain their social networks, and appropriate training should be provided (ODPM 2005; Ofcom, 2006; the Department for Culture, Media and Sport (DCMS) and the Department for Business Enterprise and Regulatory Reform (BERR), 2009a; 2009b; Niace, 2012).

Between 1999 and 2003, the UK government supported the establishment of a network of UK Online Centres, as a measure to address digital and social exclusion, by making ICT training available in safe and accessible venues such as libraries and community centres. The government was also committed to ensuring '*that everyone who wants it has access to the Internet by 2005*' (Cabinet Office, 2002, p.1). The UK Online Centres comprise a network of approximately 3000 partner centres and 2000 access points. Many of these were initially financed from the Big Lottery Fund and Capital Modernisation Fund (CMF) https://webarchive.nationalarchives.gov.uk/20130323042144/https://www.education.gov.uk/publications/eOrderingDownload/RR502MIG727.pdf with later funding from the Department for Education and Skills (DFES) and, since 2011, through the Good Things Foundation. (https://www.goodthingsfoundation.org/about-good-things-foundation).
In 2003, the centres were reported to be successful in upskilling unemployed people of working age and people from ethnic minority groups (DFES, 2003). While initially Age Concern ran some UK Online sites (Becta, 2001) the primary focus of these centres, training unemployed adults and ethnic minority groups, has continued. Digital Britain Forum reported that:

> *The UK Online Centres are used by about 2 million people each year. Up to 70 percent are socially excluded individuals, while about 50 percent of people who turn to one of the centres have no formal qualifications. However, nearly two thirds of the users take advantage of the information and advice they receive through the UK Online Centres network to improve their education or find an employment.* *https://www.digitalbritainforum.org.uk/(Accessed: 28 February 2019)*

Older adults are less frequently mentioned as users of the now renamed, Online Centres, although the potential benefits of digital skills for older people have long been recognised (Blit-Cohen & Litwin, 2004; Olphert et al., 2005; Morris et al, 2007; Age UK, 2015; Centre for Ageing Better, 2018). Online Centres, focussed on equipping adults with digital skills, have much to offer the substantial population of older non-users of the internet.

Concurrently with the establishment of UK Online Centres, by late 2002, the Lottery Funded 'People's Network' had facilitated the installation of approximately 20,000 public access internet terminals in public libraries across the UK. Supported by £100 million of Lottery funding, the New Opportunities Fund, which initially financed the People's Network, was intended to widen engagement among disadvantaged groups. By 2020, with more than 40,000 internet enabled computers in public libraries, the People's Network continues to support social and digital engagement.

For older individuals without internet access and digital skills, digital exclusion has been found to be positively associated with socio-economic disadvantage in other spheres of life (Ofcom, 2019; ONS, 2010; Age Concern & Help the Aged, 2009). A succession of policy initiatives (DCMS, 1998; DfES/CMF, 1999; ODPM, 2005) led to the Digital Britain Interim and Final Reports (DCMS & BERR, 2009a; DCMS & BERR, 2009b) and the implementation of the Get Digital Programme (2010-11) whereby the government undertook to develop the nation's digital skills and invested substantially in training older people to use the internet (pp. 15-16).

The Get Digital Programme was supported by a Government grant and Lottery Funding and the government had anticipated that local authorities would provide funding to continue the programme (Niace, 2012). However, with the austerity measures introduced by the UK government, from 2010, the public funding landscape changed dramatically and it was recognised that any funding for future programmes would have to be secured from the providers of specialist housing for older people (Niace, 2012). After 2010, neither local government nor specialist housing landlords were ready to make funding available to build on the achievements of the Get Digital Programme (Niace, 2012). Consequently, since 2012, opportunities for supported housing residents to acquire or develop their digital skills, have been greatly reduced. However, a broader digitalisation of health and care services is currently gaining ground in England and Scotland (Scottish Government, 2019) and may facilitate internet access for some supported housing residents. Meanwhile, ONS has consistently reported that the lack of skills is a barrier to older people's engagement with the internet (ONS 2017[2]).

The focus of more recent digital engagement programmes, such as Go On UK (2013-2016) and One Digital (2016), has been on upskilling the wider UK population, with older people targeted by these programmes, as one sub-group within the population at large. Reports of the potential health and social benefits of using the internet in later life (Government Office for Science, 2015; Beth Johnson Foundation, 2016) continue to be juxtaposed with ONS reports of many older adults with little, or no experience of using the internet (ONS, 2015; 2016; 2019).

In March 2017, the UK government launched the UK Digital Strategy (2017) as a further development of the nation's Industrial Strategy, with a focus on the application of digital skills to support economic growth. The continuing 'digital divide' was referenced within the report and the fragmented nature of digital skills training, across the UK, was also acknowledged. A Digital Skills Partnership (DSP) was established, bringing together public, private and third sector organisations, to encourage coordination between digital skills providers and the sharing of knowledge and best practice in digital skills training.

Local needs would be addressed through the establishment of Local Digital Skills Partnerships and within this framework, technology providers, banks, and third sector organisations were encouraged to collaborate to provide digital skills training in local communities. Young people and unemployed people would be encouraged to develop their digital skills, and the *'most digitally excluded (such as homeless people, people with disabilities, people with mental health problems, and prisoners)'* would have access to digital skills training through a £1.1million fund, managed by the National Health Service (NHS). Older adults' digital exclusion was not specifically addressed and while Lifelong Learning was cited within the UK Digital Strategy (2017), the focus was on upskilling people in '*digital techniques and technologies…across their working lives'* with adults outside the workforce, seemingly less of a priority. In parallel with the UK Digital Strategy 2017, the Government Digital Service (GDS) is rolling out the Government Transformation Strategy (2017-2020) relocating access to services from offline to online while also continuing to provide Assisted Digital Support for adults without the skills, confidence or trust in the system to access online public services, independently.

In 2016, the ONS Statistician concluded:

> *Regular internet use continues to rise, with more than 8 in 10 people going online almost every day in 2016. However, many older people are still to catch up with the digital revolution, with nearly half of single pensioners still having no internet access at all. (ONS 2016, p.2)*

Despite continuing initiatives to increase internet use across the UK, ONS Statistical Bulletin, Internet Users in the UK: 2018 reported:

> *4.5 million adults – almost ten per cent of the adult population - have never used the internet and 2.6 million of these people are aged seventy five years and over. (p.6)*

While for households with one adult aged sixty five years or over, only fifty nine percent had internet access, for older adults, living in residential care homes, Damant and Knapp (2015) noted that internet access was even less frequently available:

> *Only about 25% of registered care homes in the UK provide internet access to residents. (p.6)*

Comparable data on internet access for residents of extra care housing schemes have not been found in the sources searched for this review.

However, UK government policy to promote faster broadband speeds and digitalisation across a range of services, is also driving changes within the supported housing sector (DHSC, 2018; DCMS, 2015). The change from analogue to digital telephone services, planned for completion in 2025, will necessitate change from current analogue telecare systems to a digital telecare system. This change has the potential to usher in digitalisation across a broader range of applications, within older adult's supported housing.

Consequently, in 2020, digital systems are being piloted and introduced as management tools within older adults' supported housing schemes. Residents' internet access can be made available, as an option, within these digital health and care systems. With the publication of the framework for action, 'A Fairer Scotland for Older People' (2019) the Scottish government has undertaken to promote technology enabled care, encouraging the wider acceptance of digital health and care management systems. Concurrently, the Scottish government has pledged to increase digital engagement among the older population, working:

> *with groups of older people to understand how digital technology can add value to their lives in a way that is meaningful to them (p.45).*

This suggests that, in Scotland, there is a recognition that older adults derive value from internet use, according to its meaning within the wider context of their lives. At the same time, the Scottish government has indicated that the benefits and meanings of older people's use of digital technology require exploration, with older people themselves.

Scottish-based Blackwood Homes and Care has evidenced residents' early experience of internet use, following the provision of internet access for one hundred older adults and adults with disabilities, living in residential

care homes and supported housing in the community. This followed the introduction of Blackwood's bespoke digital management system (https://www.blackwoodgroup.org.uk/clevercogs). Rochdale Boroughwide Housing, working with Tunstall Healthcare (UK), has also reported plans to adopt a digital care and health management system, that will provide wifi to extra care tenants at the Hare Hill extra care housing scheme in Rochdale (Rochdale Boroughwide Housing, 2018). On the basis that internet access is likely to become more readily available to extra care tenants, with the wider introduction of digital care management systems, the need for an understanding of extra care tenants' use of the internet and the meanings they attribute to online social contact, becomes more current and pressing.

Section 2 Research literature - older adults' internet use, social relationships and extra care housing

Introduction

Section 1 contained a discussion of social, digital and health care policy frameworks which address older adults' social and digital inclusion and provide a backdrop to extra care tenants' use of the internet for social contact. In Section 2, a thematic review of the research literature is presented, indicating what is already known of the field of study and enabling themes to be identified, organised and discussed. Initially, a literature search was undertaken to identify relevant research papers and this process is first outlined. The fluidity of the concept of older age, which emerged from the literature, is then discussed and the characteristics of extra care tenants are outlined. Research literature addressing the concepts of loneliness and social isolation are then considered and extra care housing is appraised, as a social environment. Approaches to address loneliness and social isolation, including older adults' use of the internet for social contact, are next explored in the literature. Online social contact is one aspect of extra care tenants' social engagement and the literature addressing older people's long-established social relationships and the connection between lasting friendships, resilience and a sense of self in older age, conclude this review of the research literature.

Identifying the research literature

To ascertain the extent of current knowledge of the field of study, a thematic review of the literature was carried out, commencing with a literature search, initially utilising electronic resources and databases. Databases searched included NORA, EBSCO, Web of Science, Wiley Online Library, PubMed, CINAHL, Sage Publications, Taylor and Francis, Google Scholar, Elsevier, and Scopus. Databases were first interrogated using key elements of the research question *'extra care housing'*, *'internet'* and *'social contact'* as the search terms. Synonyms for these search terms were then substituted and the searches repeated. This process was repeated using related concepts, for example *'loneliness', 'social isolation',* and *'social exclusion',* as key words. Key words were then used in multiple combinations, as search terms, for example *'loneliness AND extra care housing AND digital skills'*. Key words across the search areas indicated above, included but were not limited to:

Extra care housing, housing with care, very sheltered housing, residential care, sheltered housing, retirement housing.

Internet, world wide web, digital skills, email, e-mail, Facebook, Skype, texting, online.

Social contact, social interaction, social relationships, social networks, social inclusion, social exclusion, loneliness, social isolation.

Extra care tenants, older people, seniors, elderly, elders.

These search terms yielded multiple research papers and searches were refined, saved and accessed later for further interrogation. For example, a Google Scholar search based on the terms *'seniors AND 'extra care housing' AND internet'* returned 35,900 results. The same search, refined by publication dates of 1998-2019 yielded *'about 17,000 results'*. The search was repeated utilising the Northumbria University Library database, including external collections, and returned 2,718 papers. Screening by publication date (1998-2019) and limiting the search to peer

reviewed journals, returned 537 publications. Searches were revisited and further refined with abstracts reviewed and duplications and irrelevant papers removed. Sample, methodology and study location were considered for relevance, with qualitative or mixed methods approaches and studies exploring the use of ICT, with samples drawn from older adults, living in supported housing, being prioritised. Selected papers were read in full and saved, with additional papers, fulfilling at least one of the priority criteria, then being studied in depth. Citation tracking led to the identification of related research.

To extend the scope of the literature search, websites for organisations involved with older adults' internet use were also hand searched. These were Age UK, (https://www.ageuk.org.uk/) Digital Unite, (https://www.digitalunite.com/) and Niace, (http://www.niace.org.uk/).. The website of the Campaign to End Loneliness (https://www.campaigntoendloneliness.org/) was used to locate recently published academic research into loneliness, social isolation and the connection between social networks and health in later life. The British Society of Gerontology (BSG) website (https://www.britishgerontology.org/) and the BSG publications, 'Ageing & Society' and 'Generations Review' were sources of current research, policy, practice and discussion regarding older adults' housing, social relationships and use of technology. Websites for the Joseph Rowntree Foundation (https://www.jrf.org.uk/) and the Housing Learning and Improvement Network (https://www.housinglin.org.uk/) were additional sources of research literature covering extra care housing and older adults' use of technology. Journals on human-computer interaction, nursing journals and journals on older adults' health, wellbeing and quality of life were also accessed. The literature review was an iterative process, whereby relevant studies were identified, themes were highlighted, nuances noted, research reports read and re-read, and study outcomes re-considered, as additional literature emerged.

The threshold of older age

Within the research literature, the age at which an individual was considered to be an 'older person' varied quite significantly. Valentine (2013) defined older Facebook users, as adults aged thirty five years or older, while Pastore (2001), studying older adults' online purchasing habits, in the United States, suggested fifty years was the boundary to 'older age'. In other studies, the threshold of older age was reached at fifty five years (Sum *et al*., 2008), sixty years (Erickson & Johnson, 2011), sixty five years (Victor, 2012; Eurostat, 2018) and over seventy years (Sanderson & Scherbov, 2015). It can be concluded that the onset of older age is seen along a continuum and within a context and cannot be determined by chronology alone.

The phenomenon of ageing societies, across the globe, has been the subject of research for some years (Sanderson & Scherbov, 2008; 2015; WHO, 2015; Government Office for Science, 2016; UN, 2017; Kingston *et al*., 2018). In the UK, increases to the state pension age and the abolition of the default retirement age, have formalised a change in societal expectations of older adults and, consequently, the attainment of a predetermined, chronological age, is no longer the universal boundary to older age (Department for Work and Pensions, 2017). Changing views of ageing, interweave with complex cultural, biological and social frameworks for understanding the perception, onset and experience of older age (see Chapter 4, Theoretical Framework pp. 79-83).

Perceptions of the threshold of older age also differ among providers of supported housing for older adults in the UK. The Extra Care Charitable Trust states:

> *The opportunity to apply for a home is primarily available to those over the age of 55. There is no upper age limit. (https://www.extracare.org.uk/living-with-extracare/applying-for-a-home/? Accessed 9 September 2019)*

For other providers of extra care housing, the minimum age at entry varies between fifty and sixty years, with some extra care housing schemes, accepting adults aged over forty years. However, the average age for older

adults to relocate to an extra care housing scheme, has been stated as approximately eighty three years (Housing LIN, 2016). This suggests that the strong policy driver, in the UK, to support individuals to remain for as long as possible in their own home, has also influenced the drift to supported housing and residential care homes.

Characteristics of extra care tenants

The extra care population in the UK numbers over fifty thousand older individuals (Housing LIN, 2019) with a ratio of two to one, in terms of women and men, within the population (Housing LIN, 2016). While extra care housing has been described as housing for *'frail, elderly'* individuals (Winchester City Council, 2019; Department for Communities, 2019) the research literature suggests a more complex and diverse population in terms of age, physical functioning and health status (Evans and Vallelly, 2007; Callaghan *et al.*, 2009; Phillips *et al*., 2015; Gray, 2017). In a review of extra care housing schemes built between 2004 and 2006, Darton *et al.*, (2011) found that the mean age of extra care tenants was 80.5 years, differing from the Housing LIN (2016) estimate of an average age of 83 years at entry, and suggesting deferred entry or fluctuation within the population. Darton *et al.*, (2011) also found that most tenants (65%) had moved into extra care housing from their own home in the community, indicating a rupture with their established patterns of living. Many extra care tenants were found to be widowed, experiencing some physical, sensory or cognitive difficulties and some with limited mobility (Darton *et al.*, 2012). Bäumker *et al.*, (2011) comparing statistically matched pairs of individuals, admitted to residential care (1995-1999 and 2005) and extra care housing (2005), found that extra care tenants generally experienced better physical functioning, subsequent to admission, compared with individuals entering residential care. The extra care ethos emphasising tenants' self-reliance, combined with professional care and support, as required, may enhance tenants' ability to live independently after a transition to extra care housing.

Loneliness, Social Isolation and Housing Transitions

The concept of extra care tenants' loneliness, in a communal housing scheme, may appear counter-intuitive. However, when a relocation to extra care housing involves separation from an individual's established social network, long-term friendships may be difficult to maintain (Burholt *et al.,* 2013). Loneliness and social isolation have been perceived, in popular culture, as integral to the later years of life (Tornstam, 2007; Victor *et al.,* 2002; Baltes, 1995; Heylen, 2010). Within the research literature, the terms 'loneliness' and 'social isolation' are sometimes used interchangeably (Malcolm *et al.,* 2019; Victor *et al.,* 2002). However, these terms are more frequently considered to refer to related, but distinctly different concepts. Loneliness is:

> *a subjective negative feeling that can encompass emotional loneliness – the absence of a significant other (for example, a partner or close friend), and social loneliness – the absence of a social network (for example, a wider group of friends, neighbours.) (Bernard & Perry, 2013, p.3)*

As loneliness is a subjective experience, an individual can feel lonely within a group and loneliness can be experienced despite a seemingly supportive social environment, if the individual's needs for social engagement are not met.

> *A person can, therefore, have a large number of connections and still experience the subjective feeling of loneliness' (IRISS, Paper 25, 2014).*

While loneliness is a subjective, negative experience leading to unhappiness, the same is not true of social isolation. Social isolation is generally defined as an objective state whereby an individual has few social resources, a small social network and limited engagement with others. However, depending on the individual's own needs, they:

> *may be objectively isolated but not experience associated negative emotions. (IRISS, Paper 25, 2014).*

When an older adult relocates to extra care housing, this may occasion a disruption to their long-established social relationships, with the potential for social isolation, which may contribute to an individual experiencing

loneliness. While data on the prevalence of loneliness among the extra care population has not been found, Victor (2012) noted that severe loneliness among older care home residents was at least double that of community-dwelling older adults. Extra care housing differs from residential care and is not specifically included or excluded from the scope of Victor's (2012) study. However, the vulnerabilities leading to a transition to extra care housing can have commonalities with the vulnerabilities leading to admission to residential care and thus may indicate a risk of loneliness and social isolation for extra care tenants.

Extra care tenants' friendships

Social engagement between extra care tenants is central to the extra care ethos and opportunities for friendships to develop, within extra care housing schemes, have frequently been appraised (Twyford, 2018; Gray & Worlledge, 2018; Mullins, 2015; Burholt *et al.,* 2013; Callaghan *et al.,* 2009; Evans & Vallelly, 2007). While extra care housing promotes social engagement, the extent to which this leads to new friendships between tenants, is uncertain. Whilst Twyford (2018) found new friendships could develop in extra care housing, she also advised that cliques existed in some extra care housing schemes. Darton *et al.,* (2008) suggested that where cliques developed, these were not harmful, however, Chandler and Robinson (2014) found that cliques could lead to an individual's social exclusion, ostracism, or the rejection of new residents. Conversely, Evans and Vallelly, (2007) found that extra care tenants attached great importance to their new friendships with neighbours in extra care housing schemes and these relationships were '*the basis of their social lives*' (p.28).

Following a survey of three hundred and twenty six managers of older people's supported housing, Gray and Worlledge (2018), posited that participation in organised activities could facilitate friendship development among tenants, but noted that the limited choice of activities, reduced the effectiveness of this approach. Burholt *et al.,* (2013) noted opportunities for friendship formation in extra care housing schemes, but cautioned that social interactions with new neighbours, could seem superficial and less satisfying, than tenants' well-established friendships

in the community. Victor and Yang, (2012) found that a 'confiding relationship' could be protective against loneliness, suggesting that a single 'high quality' relationship was more likely to satisfy an older adult's need for friendship, than a larger number of more superficial social connections.

The literature therefore indicates that while neighbours in extra care housing schemes may become friends, new relationships with neighbours cannot be relied upon to offer the emotional satisfaction provided by tenants' long term friendships in the community. Consequently it is important that extra care tenants maintain their existing friendships, after a transition to extra care housing. Gray and Worlledge (2018) commented that internet use can reduce loneliness and isolation for supported housing scheme tenants and should be encouraged as '*an important gateway to the wider social environment'* (p. 362). They noted, however, that computer lessons were only offered on two of the thirty two estates participating in their study.

Loneliness, health and online social contact

The connection between loneliness, social isolation, ill-health and cognitive decline in older age has been well documented (Cacioppo *et al.*, 2006; Holt-Lunstad, 2010; James *et al.*, 2011; Courtin & Knapp, 2015; Holt-Lunstad & Smith, 2016; Zhong *et al.*, 2017; Hanratty *et al.*, 2018). Damant and Knapp (2015), suggested that online social contact may enable older adults to maintain their (sometimes geographically dispersed) social networks, with consequent benefits to their health and wellbeing. They commented that older adults' digital engagement was associated with positive health and social outcomes, citing a number of studies to support this view (Tsai *et al.*, 2010; Age UK, 2010b; Choudrie *et al.*, 2010; Independent Age, 2010). However, they advised that some researchers, (Woodward *et al.*, 2011; Slegers *et al.*, 2008) reported little change in older adults' loneliness, depressive symptoms or cognitive health as an outcome of internet use.

Contradictions associated with social internet use

Fang *et al.,* (2019) in a quantitative study of older adults in Hong Kong, highlighted a contradiction at the heart of social internet use, whereby internet use to alleviate loneliness may be a *'mixed blessing'*, leading to increased psychological distress for some lonely, older adults. This echoes an earlier study by Sum *et al.,* (2008), who found that internet use could alleviate loneliness, when contact was made within an existing social network. However, when new social relationships were sought online, they suggested that social internet use could be associated with anxiety and 'family loneliness'. Contradictions existing in this literature suggest that further research is required.

Nowland *et al.,* (2018) also signalled a complex association between loneliness and social internet use, suggesting a dynamic and bi-directional interconnection. They posited that for some lonely individuals, social internet use replaced offline relationships, reducing the occurrence of face-to-face meetings and thus increasing loneliness. However, for other individuals, existing relationships were enhanced through online social contact and, contrary to the findings of Sum *et al.,* (2008), Nowland *et al.* (2018) suggested that new relationships were successfully established online. Nowland *et al.,* (2018) found that the benefits of online social contact were greatly increased when an online relationship was migrated to offline. The progression from online social contact to face to face meetings, may raise safety, mobility or financial concerns. However, where online social contact is the only means of maintaining long-distance social connections, the use of video calls may increase feelings of connection, without the potential risks and costs of face to face contact.

The relationship between loneliness and online social contact is dynamic and subject to temporal change. Nowland *et al.,* (2018) advised that more research was required and highlighted a need for longitudinal studies, to establish the flow of causality, between loneliness and problematic internet use. Longitudinal studies could also usefully explore the impact of time on older adults' experience of social internet use. While internet use may

provide a means of supporting extra care tenants' social relationships, evidence in the literature appears to be inconclusive.

Older adults' acquisition of digital skills

Context is significant for older internet users. This is highlighted in the research literature, which differentiates between the (sometimes public) context of learning, and the (often domestic) context of ongoing internet use. Damodaran and Sandhu, (2016) reporting on their community-based, mixed methods, participatory study, with older internet novices, established that their preferred learning environment would be an informal community setting, with face to face contact with tutors and no time pressure. This open ended approach would draw on *'innovative funding models and revenue streams'* (p.17) with contributions from local government, community and business interests; a funding model which may be difficult to sustain. Damodaran and Sandhu, (2016) acknowledged that access to ongoing social and technical support was a *key determinant of sustained digital inclusion* (p.2) adding that such support is not always available to internet novices.

In an earlier study, Selwyn (2003) advised that the social setting in which a novice internet user embarked on their online experience may encourage or discourage their continued use of the internet. Age UK (2013) presented a Model of Internet Engagement (drawn from Hill *et al.,* 2008) indicating the necessary pre-conditions for the acquisition of digital skills. These conditions included a positive attitude, cultural currency, a metacognitive learning environment and expert learners. Selwyn (2004) noted that any realistic notion of access to ICT must be defined from the individual's perspective and he distinguished between having access or ownership of technology and having the ability to make meaningful use of technology. He quoted Bourdieu (1997) to make this distinction and to explain the impact of culture and the social environment on the uptake of computing:

> *To possess the machines, he [sic] only needs economic capital; to appropriate them and use them in accordance with their specific purpose he must have access to embodied cultural capital; either in person or in proxy (p. 50).*

Bourdieu's distinction between ownership of the equipment and having the means to use the equipment productively still resonates today, in the lives of older recipients of digital devices, with little or no experience of using a computer. Access to the cultural capital required to use a computer *'for its specific purpose'*, is not always available to older individuals. Selwyn (2004) found that cultural, economic and social capital all contributed to an individual's engagement with and sustained use of ICT. Consequently, a reliable local network of formal or informal technical support could facilitate an individual's continued use of ICT whereas the absence of support could lead to disengagement.

Selwyn (2004) also distinguished between the practicalities of having physical access to ICT based technology, through open access workstations in community venues, and the issues of time, cost, ease of use and quality of equipment, for an individual utilising a computer in a public space. In retrospect, while Selwyn's argument for a more nuanced and socially aware understanding of access to technology still resonates, public access to government funded ICT equipment and training is much diminished since 2004. However, the stance adopted by Selwyn (2004) has commonalities with that of Damodaran and Sandhu (2016) who also argue that an appropriate learning environment and social and technical support are required to sustain older adults' engagement with ICT.

Seifert *et al.* (2017) studying internet use among older Europeans, also considered the influence of the social context on internet uptake. Exploring internet use in residential care homes, in Switzerland, Seifert *et al.* (2017) anticipated that the strongly regulated social environment of residential care, could discourage internet use among residents. They found that internet uptake by younger residents, was less than the average for their age group, among community dwellers, whereas among the oldest residents, there was no difference in internet use between care home residents and community dwellers of the same age. Seifert *et al.* (2017) hypothesised that the oldest care home residents, who were also internet

users, may have been early adopters, who had retained their internet skills into older age.

Older adults' self-understandings as internet users

A broad literature indicates that older adults continue to lag behind younger people in terms of their adoption and use of ICTs (Age UK, 2018; ONS, 2019; Friemel, 2016; Quan-Haase, *et al.,* 2014; 2016; Anderson & Perrin, 2017; Center for the Digital Future, 2016; Hunsaker & Hargittai, 2018). Concurrently, older adults have commonly been depicted in popular culture, as lacking in digital skills (Swindell, 2002; Lam & Lee, 2006; McDonough, 2016). Schreurs *et al.,* (2017) in a mixed methods study of social barriers to older adults digital literacy, noted the representation older adults, in popular culture, as *'technology inept and digitally illiterate'* (p. 361) and indicated that the ubiquity of such narratives may undermine older adults' self-confidence, discouraging their adoption of online activities which could enhance their quality of life.

McDonough (2016), in a review of the literature, on ageism and older adults' adoption of technology, considered the contribution of ageist attitudes to the digital divide between younger and older adults. She cited the prevalence of ageism across society, contending that older adults who internalise negative perceptions of their digital skills may find the psychic cost, in terms of increased fear and anxiety, too high a price for internet adoption. She posited that the digital divide could well continue, as negative societal attitudes, to older adults, may continue to discourage the adoption of new technologies, even among current members of the younger generation, as they age.

In contrast to the findings of McDonough (2016) and Schreurs *et al.,* (2017), Barnett and Adkins (2004) found self-confidence and enthusiasm among a sample of older Australian internet users, while Age UK (2018) reported a successful approach to building older adults' self-confidence as internet users (https://www.ageuk.org.uk/information-advice/work-learning/technology-internet/helping-older-people-gain-digital-

confidence/) Older adults' own reflections on their characterisation in popular culture as *'digitally inept'* have rarely been found in the literature. However, the confliction in the literature indicates a requirement for further research into older adults' self-perceptions as internet users and the implications this may hold for their adoption of ICTs.

Community-based intergenerational support

The requirement for older computer novices, for social and technical support, has been highlighted in the literature for some time (Selwyn, 2004; Hill *et al*., 2008; Age Concern and Help the Aged, 2009) and this requirement continues to resonate (Damodaran & Sandhu, 2016; Schreurs *et al.*, 2017). Informal intergenerational support within the family has been found to have limitations:

> *Although family members were considered to be a good resource, there was a strong feeling that relying on family members for training would be unsuitable given their lack of time, interest and patience. (Age Concern and Help the Aged, 2009)*

Age UK (2010a), in an evidence review of technology and older people, drew together examples of formal, community-based intergenerational programmes of ICT support, whereby young people provided tuition for older adults in their locality. The evidence suggested that these interventions were socially positive. However, the review did not fully appraise the outcomes of the interventions for the participants. The impact of intergenerational ICT projects is articulated more fully by Mitchell (2016) reporting on the Bridge Meadows community (Portland, OR, USA) where intergenerational learning was found to:

> *reduce the sense of social isolation adult residents feel. They also learn new skills from the kids, such as how to use computers to go on the Internet. In turn, kids learn to think about others, not just themselves. (p.3)*

Mitchell (2016) suggested that intergenerational living and learning may offer a solution to many of the challenges of ageing, including loneliness, cognitive issues, and a sense of belonging to a socially cohesive community. However, while the report provides a rich commentary from

a provider and researcher's perspective, older adults' perspectives are not articulated.

Internet use in different home environments

In studies across differing home environments, including nursing homes, residential care homes, supported housing and community housing with domiciliary support, researchers found that online social contact can enhance social connection and may help to alleviate loneliness (McConatha, *et al.,* 1994; Seifert *et al.,* 2017; Morton *et al.,* 2018). However, little was found to illuminate internet use within extra care housing schemes, and many residents of supported housing have limited opportunities for online social contact. Moyle *et al.,* (2017) in a descriptive survey of residential aged care facilities, in Queensland, Australia, found that audio-only telephone was the residents' most frequently used communications device. They noted that some residential care facilities did not provide residents with an internet connection, while others made a shared internet connection available but restricted residents' access to digital devices.

In the UK, the availability of tenants' internet access in older adults' supported housing varies considerably. In 2015, Damant and Knapp stated that only about twenty five percent of registered care homes offered internet access to residents. Between 2015 and 2019, there has been a gradual increase in the provision of tenants' internet access, sometimes within commercial packages of online services, for housing scheme managers (https://www.blackwoodgroup.org.uk/clevercogs; https://uk.tunstall.com/wp-content/uploads/2018/08/Rochdale-Boroughwide-Housing-Connected-Care-and-Health-solutions-in-Extra-Care.pdf). Where an internet connection is provided, the offer of wifi availability is sometimes used as a marketing tool, to promote a housing scheme to new entrants. This indicates that housing providers are aware that internet access is appealing to older adults and suggests that a tenants' internet connection could usefully be made more widely available by housing providers.

Resilience and continuity

It has been argued that the contribution of social relationships, to resilience and a good quality of life in older age, should be recognised in national social policy frameworks (Baltes & Baltes, 1990; Bartley *et al.*, 2006; Umberson & Montez, 2010; Age UK, 2013b). However, the role of internet use, in supporting older individuals' resilience, is often absent from the literature. In their study of resilience in older Americans, Fuller Iglesias *et al.* (2008) found that the size of an individual's social network and the quality of their spousal or other intimate ties were indicative of the individual's resilience. They posited that a large social network may provide an element of protection from adversity and be indicative of the interpersonal resources available to an older person. This, they contended, may lead the individual to report fewer depressive symptoms and higher life satisfaction, even when experiencing stressful life events. They concluded that '*the role of social relations [is] a promising protective factor'* (p.191) in older people's resilience and should be explored in more depth. There is, however, no reference to online social contact, although this may contribute to the maintenance of a sizeable social network.

The interconnection between lasting social relationships and older people's resilience, has also been highlighted by Blane *et al*. (2011) who drew implications for social policy from their findings. Drawing on findings from a component project of the Bartley *et al.* (2006) research, Blane *et al.* (2011) considered the nature of resilience in older age, reporting that well-established social relationships were more significant than socioeconomic status in combating adversity, in later years. They noted, significantly, that inter-personal relationships only conferred resilience when the relationships had been established before and continued during exposure to adversity. They commented:

> *Resilience is derived from using resources, primarily inter-personal, to stabilise the life change consequent on adversity. The policy implications of these results could be important. Policies to enhance resilience need to foster good inter-personal relationships among all older people (p.2).*

Online social contact is not referenced as a resource *'to foster good inter-personal relationships'*, although it may enable an older individual's long-term friendships to be mobilised, thus enhancing resilience.

Blane *et al.* (2011) found that relationships which were established subsequently to an adverse event, could not promote resilience to that event. Established relationships maintain a connection with the earlier self, prior to the adverse occurrence, and this facilitates continuity of an individual's sense of themselves after difficulty or loss. Relationships established following an adverse event are unable to provide the connection with the earlier self that is needed for continuity. Consequently, new relationships, such as those with neighbours in an extra care housing scheme, will not provide extra care tenants with the same resilience to adverse circumstances, as the support available through a long established friendship.

Little has been found in the literature, making a connection between older adults' online social contact, resilience and the need for a continuous sense of self, following an adverse event or occurrence. The literature does reference a number of measures which may support extra care tenants' long tern relationships. Burholt *et al.* (2013) have suggested the provision of low cost transport to facilitate tenants' face-to- face contact with family and friends, while referencing studies (Tsai *et al.*, 2010; Groves & Slack, 1994; White *et al.,* 1999) which indicate that internet use may help to alleviate loneliness for nursing home and supported housing residents. However, the contribution of online social contact to extra care tenants' social relationships, resilience and continuous sense of self has yet to be fully recognised.

Maintaining a coherent personal biography

The significance of a maintaining a coherent personal biography and the contribution this makes to wellbeing in older age, emerges from the gerontological, anthropological and educational literature (Muhli & Svensson, 2017; Pirhonen & Pietilä, 2015; Pirhonen *et al.,* 2018; Kaufman, 1986). Barnett & Adkins (2004) drew on Bourdieu's (1977) concept of Habitus, or personal understandings of power and agency,

within society, when they explored older adults' adoption of ICTs, to maintain their hobbies and interests, when physical or sensory losses made it difficult to continue. They found that an individual's sense of self-agency and a positive orientation towards the future, indicated their likely pursuance of their interests, online, enabling them to adapt to age-related changes, while retaining a continuous sense of their own biography.

Kaufman (1986) in her anthropological study of the self, identity and meaning, in later life, stressed the importance of the continuity of the core being into older age, noting that the concerns and interests which guided an individual's earlier years can continue, though experienced differently, in later life. She found, in her study of community and nursing home dwelling older Americans, that although personal circumstances change in later life, individual needs for affective ties, family, achievement and respect, generally remain constant. She remarked:

> *I discovered through my research that although sociocultural demands for change are inevitable in late life and do present dilemmas of being and action, people in describing the meaning of their lives, are able to create continuity of self. This process enables them to cope with demands for change and thus is a critical resource for remaining healthy (p. 6.)*

Pirhonen & Pietilä (2015) and Pirhonen *et al.* (2018) undertook ethnographic studies, in a geriatric hospital and sheltered home in Finland. The authors found that maintaining external social relationships was supportive in re-affirming the continuity of self after a relocation. They suggested that residents needed positive social connections both within their housing scheme and the wider community. Pirhonen and Pietilä, (2015) suggested that social connections, with community-dwelling friends and relatives, could also provide instrumental assistance in achieving residents' personal goals, thereby enhancing the residents' sense of autonomy and self-agency. While online social contact is briefly referenced by Pirhonen *et al.* (2018) as a means for one resident to remain '*connected to the world outside' (p.1878),* it does not appear to have been considered for wider use among residents of the sheltered home.

Enabling residents to maintain a continuous sense of their own biography may contribute to wellbeing and this concept was explored by Muhli &

Svensson (2017) in a narrative study of residential care home dwellers, in Sweden. Their study engaged residents in narrated reflections on their personal biography, with consideration of their younger self, present circumstances and envisaging their possibilities for the future. Within the participants' narratives of reflection and renewal, family visits were referenced, however, there was no indication of residents maintaining their family relationships online.

Therefore, while the contribution of long lasting social relationships, to an older individual's resilience, wellbeing and sense of self, is recognised in the literature, this is not always linked with an opportunity for the individual to maintain their social relationships online. The literature thus highlights a contradiction, whereby older residents of supported housing schemes may benefit from online social contact, while their opportunities to use the internet, to foster their social connections, can be quite limited.

Section 3. Extra care tenants' experience of online social contact – a gap in knowledge

In 2020, the Covid-19 pandemic has led to an increased focus, in the literature, on the use of online social platforms to enable older adults to maintain their social relationships (Appello, 2020; Ipsos MORI & The Centre for Ageing Better, 2020). Older individuals' enjoyment of positive online experiences has been evidenced in the literature (Barnett & Adkins, 2004; Tsai *et al.,* 2010; Age UK, 2018) and in an era of shielding and social distancing, social internet use has the potential to provide significant benefits for lonely and vulnerable older individuals (Ipsos MORI & The Centre for Ageing Better, 2020). While increasing numbers of older adults, in the population at large, may be adopting the internet to maintain their social relationships (ONS, 2019; Huxhold *et al.,* 2020; Yu *et al.,* 2020) there is a gap in knowledge of extra care tenants' experience of social internet use.

Older adults' positive online experiences

A growing body of international literature (Russell *et al.,* 2008; Sum *et al.,* 2008; Pfeil *et al.,* 2009; Age UK, 2015a; Khosravi *et al.,* 2016; Nowland

et al., 2018; Szabo *et al.*, 2018; Fischl *et al*., 2020; Hage *et al.*, 2020; Benvenuti *et al.*, 2020; Yu *et al.*, 2020) indicates that among the older adult population, many community dwelling individuals interact positively online, appropriating the internet to achieve social, instrumental and informational goals. The literature evidences that while new friendships may be sought, the primary motivator for older adults' online activity is the maintenance of existing social relationships (Russell *et al.*, 2008; Damant & Knapp, 2015; Age UK, 2015b; Szabo *et al.*, 2018; Nowland *et al.*, 2018; Fischl *et al*., 2020; Yu *et al.*, 2020). Thus, online social contact can provide older adults, at large, with a vehicle for maintaining their social connections.

Studies of social internet use, by older adults, in the population at large, indicate positive social outcomes across differing locations and social contexts. In a study located in Sweden, Fischl *et al*., (2020) engaged a sample of 18 community dwelling older adults, aged 66 to 81 years, in a qualitative inquiry into the contribution of internet use to older adults' social participation. Data derived from focus groups indicated that when face to face contact was dwindling, online social contact facilitated the participants' continued engagement with their local community. In an ethnographic study, in The Netherlands, Hage *et al.*, (2020) noted that when older adults accepted the 'norms and values' of social media, they communicated more effectively online and enhanced their feeling of belonging. The sample comprised 10 community dwelling older adults, aged 62 to 75 years, with data collected through observation and interviews. Russell *et al.*, (2008) in an exploratory study of older Australian internet users, engaged a sample of 154 community dwelling participants, aged 55 years and older. Data derived from a survey and in-depth interviews, indicated that participants were predominantly retired professionals and internet use enabled them to sustain their social capital. In a quantitative, observational study in Italy, engaging 271 participants, aged 60 to 94 years, Benvenuti, *et al.*, (2020) found that social internet use increased the participants' frequency of social contact, perceptions of companionship and opportunities to express love and affection, thereby enhancing their wellbeing and quality of life. The literature draws on the

experience of community-dwelling older adults, and while it presents a common theme of' older adults using the internet to enhance their social connections, wellbeing and quality of life, the online experiences of extra care tenants remain to be explored.

Extra care tenants' omission from internet studies

Hunsaker and Hargittai (2018) note that a focus, in the literature, on community dwelling older adults, has resulted in the online activities of older adults living in 'supportive care' being under-researched. This view is supported by Cotten, (2017) who notes that in the USA, estimates of internet use, from the Pew Research Center, draw only on community dwelling older adults, excluding older adults living in care facilities such as nursing homes and dementia units (p.823).

In the UK, the Office for National Statistics (ONS) derives data on older adults' internet access and use, from community dwelling individuals, with a 'household address.' Similarly, the English Longitudinal Study of Ageing (ELSA) uses data collected from older adults living at 'a private residential address' in England. Other researchers draw on these studies in their own work. Matthews and Nazroo (2015) and Matthews, Nazroo and Marshall (2019), in their studies of digital engagement in later life, draw on data from ELSA, which omits individuals who relocate to a supported housing scheme. Similarly, Age UK (2018; 2015b) utilises data from ONS and ELSA, among other sources. Thus, the online experiences of older adults living in extra care housing, residential care and nursing homes can be underrepresented. Where internet use in older people's supported housing has been specifically studied (White *et al.*, 2002; Turner *et al.*, 2007; Tsai et al, 2010; Tsai *et al.*, 2015) samples drawn from extra care housing have not been found in the literature searched for this study. Consequently, the experience of extra care tenants can be overlooked and their perceptions of social internet use are largely unknown.

Damant and Knapp (2015) advise that studies of older adults' internet use commonly treat adults, aged sixty five years and older, as a single,

homogeneous group, with little distinction made for geographic location, household composition, social, demographic and ethnic differences. They posit that knowledge of internet use by sub-groups and individuals within the older adult population, is limited. Individual experience can be beyond the scope of wider inquiries into older adults' internet use. Thus, the unique perceptions and reflections of older internet users are not always elicited, creating a gap in knowledge of the meanings they attribute to their experience online. This gap in knowledge can be compounded for extra care tenants, whose circumstances, motivations, perceptions and online experiences may differ from those of community dwelling older adults. To engage extra care tenants with internet use and enable them to adopt online platforms for social interaction, an appreciation of extra care tenants' needs, aspirations and perceptions of online communication is required.

The diversity of older adults' internet use

Damant and Knapp (2015) called for researchers to appreciate the heterogenicity of older adults and to consider that internet use may vary, within the older population. The limitations of regarding older adults as a homogeneous group are clear when the extra care population is considered. The extra care population, currently comprising approximately fifty one thousand older individuals (Housing LIN, 2019) is diverse in terms of *'age, care needs, health status, cognitive functioning and aspirations*' (Evans & Vallelly, 2007, p.10). Extra care tenants' perceptions of their offline social environment have been voiced in the literature, (Evans & Vallelly, 2007; Darton *et al.,* 2008; Twyford, 2018), but little has been found to illuminate their experience of online social contact.

The research and policy literature for extra care housing broadly encompasses the physical environment, professional care and support, management and funding issues and the position of extra care housing schemes in the wider landscape of older adults' supported housing (Callaghan *et al.,* 2009; Bäumker *et al.,* 2011; Burholt *et al.,* 2013; Mullins, 2015; Gray & Worlledge, 2018; Twyford, 2018). Where the social environment of extra care housing is explored, offline opportunities

for friendship development, organised activities and architectural features which bring tenants together, are often the primary focus (Evans & Vallelly, 2007; Callaghan *et al.,* 2009; Burholt *et al.,* 2013; Twyford, 2018). Insights are provided into extra care tenants' need for satisfying social relationships (Burholt *et al.,* 2013) and the significance of older adults' 'high quality' friendships are discussed within the wider literature (Victor & Yang, 2012; Victor, 2012a). These themes are not significantly developed in relation to extra care tenants' online social contact. Nowland *et al.* (2018) advised that online and offline social relationships can be intertwined and should therefore be studied together. The interweaving of extra care tenants' online and offline social connections has not been found in the literature.

Nowland *et al.* (2018) noted that studies of internet use tend to be cross-sectional and called for longitudinal studies of online social relationships, to clarify connections between social internet use, relationship quality and loneliness. They advised that a longitudinal approach would enable the temporal development of online social relationships to be better understood. Smith (2015) also identified a requirement for longitudinal studies, highlighting a need to explore everyday life, in extra care housing, as a temporally evolving experience. While some longitudinal studies of extra care housing have been completed (Shaw *et al.,* 2016; Cameron *et al.,* 2019) extra care tenants' evolving experience of using of the internet for social contact was not considered. Little has been found in the literature to illuminate extra care tenants' online social interactions or to identify any interconnections between their online and offline social relationships.

Extra care housing is posited as a *'home for life'* (Care Services Improvement Partnership, 2008; Kneale, 2011; Netten *et al.,* 2011; Darton *et al.,* 2012; Orrell *et al.,* 2013). Extra care tenants' online and offline social relationships may alter, as they become older and physical, sensory or cognitive losses may hinder their ability to maintain their social connections. A longitudinal study of extra care tenants' social internet use would address a gap in knowledge of temporal change, in the nature and

maintenance of extra care tenants' social relationships. This could enhance current understandings of the later years of life as an extra care tenant.

Summary

While digital devices are ubiquitous within the population at large, extra care tenants' use of the internet, to support their social relationships, is under-represented in the literature. The benefits of online social contact, for the wider population of older adults, have been explored in the literature (Fischl *et al*., 2020; Hage *et al.,* 2020; Benvenuti *et al.,* 2020) but in-depth considerations of extra care tenants' social internet use have not been found. Extra care tenants' own perceptions and experiences of social internet use are, thus, largely unknown, creating a gap in understanding. Online social contact may provide continuity in extra care tenants' social relationships, after a housing transition; however this also remains to be determined, hence there is a real need to understand how extra care tenants engage with the internet, the effect of social internet use on their social relationships and the meanings that extra care tenants attribute to their experience of online social contact. With the physical presence of family and friends reduced by social distancing, the need to gain an understanding of extra care tenants' experience of using the internet for social contact, becomes more urgent and pressing. This study offers some insight into extra care tenants' experience of social internet use and the aim and objectives are re-presented below:

Aim: To explore the meanings that extra care tenants attribute to using the internet for social contact.

Objectives:

- To explore the extra care tenants' experience of using different forms of ICT based technology for social contact, with particular reference to the participants' perceptions of their own equipment.
- To explore extra care tenants' aspirations for and expectations of online social contact.
- To investigate extra care tenants' experiences and concerns about using the internet for social contact.
- To understand the experience of using the internet for social contact in the context of life as an extra care tenant.

Chapter 4 - Research Paradigm, Methodology and Theoretical Framework

Introduction

The Literature Review provided an overview of the research and policy context in which this inquiry is situated. It indicated that there is a gap in understanding of the meanings that extra care tenants attribute to online social contact. This chapter discusses the selection of the research paradigm, methodology and theoretical framework that enabled me to engage directly with the participants' experience.

Selection of the research paradigm.

As Denzin & Lincoln, (2000) advise, the selection of a research paradigm informs the underpinning philosophy and guides the design and implementation of a study, including the choice of research tools, instruments, methods and participants. Filstead (1979) described the paradigm of a socially situated inquiry as:

> *a set of interrelated assumptions about the social world which provides a philosophical and conceptual framework for the organized study of that world (p.34)*

Researchers have adopted both Positivist (Berkowsky et al., 2015; Matthews and Nazroo, 2015; Hunsaker & Hargittai, 2018; ONS. 2018;) and Post Positivist (Barnett & Adkins, 2004; Seipke, 2008; Godfrey & Johnson, 2009; Buse, 2010; Burholt *et al,* 2013) paradigms to gain knowledge of older adults' internet use. A Positivist paradigm facilitates an objective, scientific approach, with the researcher's stance being distanced from the research phenomenon, the participants and the context. A Post Positivist paradigm is more appropriate when the study requires an exploration of the participants' feelings and motivations and seeks an understanding of their experience within the research context. Initially, Positivist and Post Positivist approaches were considered for this study.

The Positivist Approach

Positivism is based on the premise that reality can be discovered through quantitative methods of data collection such as experimentation,

questionnaires and surveys, often taking the form of tightly pre-planned, structured and replicable instruments. Guba & Lincoln (1994) advise that within the Positivist paradigm:

> *Knowledge of the way things are is conventionally summarised in the form of time-and-context free generalisations some of which take the form of cause-effect laws* (p.109).

Carr (1994), adopts a similar stance, drawing on Burns & Grove (1987) and Duffy (1985), to comment on the Positivist paradigm:

> *This research approach is an objective, formal, systematic process in which numerical data are used to quantify or measure phenomenon and produce findings. It describes, tests and examines cause and effect relationships (Burns and Grove, 1987) using a deductive process of knowledge attainment (Duffy, 1985). (p.716)*

The Office for National Statistics (ONS) adopts a positivist approach in its annual survey 'Internet access - households and individuals, Great Britain'. Data is derived from the annual Opinions and Lifestyles Survey and nuances of individual experience are not sought. Data is presented in predetermined categories under broad themes of internet uptake, access and use, with additional socio-demographic categorisation. Adults aged over sixty five years are grouped as a single category. (See also pp.36-37 for a consideration of researchers' perceptions of the threshold of older age.) Since the survey utilises replicable quantitative data collection methods, it can be repeated, findings generalised and predictions made across wider populations. ONS surveys have been used in this inquiry to study trends in internet use and non-use in the older population. (See also pp.14-15). While they provide a useful overview, an in-depth understanding of participants' worlds of online social contact cannot be derived from the annual ONS surveys. Consequently, for this inquiry, an alternative approach was sought, to enable the research question to be addressed.

Post-Positivism

Post-Positivism emerged in the mid twentieth century, in response to the perceived limitations of a positivist approach, to inquiry into the realms of

human experience and understanding. (Fox, 2008; Ponterotto, 2005; Aliyu *et al.,* 2014). Post-Positivism is a metatheoretical perspective which includes the philosophical approaches of Critical Realism, Constructivism and Interpretivism, with Post-Positivists holding the view that reality is complex, multi-layered and changing. Ponterotto (2005) contends that, in contrast with the certainty of Positivism, within a Post-Positivist paradigm, reality cannot be known with certainty and '*an objective reality is only imperfectly apprehendable'* (p.129). A Post-Positivist approach facilitates an understanding of complex social issues, feelings and behaviours, with qualitative data collection methods being available, to access of sources of understanding, *'including those deriving from human experiences, reasoning or interpretation'* (Fox, 2008, p.2). In-depth interviews, focus group discussions, participant diaries and in-context observations are among the data collection methods available to qualitative researchers. Sensitivity to the participants' feelings, their perceptions, experiences and circumstances were requirements for this study and an approach within the Post-Positivist paradigm was therefore selected.

Critical Realism

Within the Post-Positivist paradigm, the framework of Critical Realism spans a range of philosophical positions, whereby reality, which is held to be independent of the individual, may be explored. Fletcher (2017) advises that Critical Realism is situated between the positivist and interpretivist paradigms, drawing on components from both approaches (p.181), while Archer *et al.,* (2016) contend that Critical Realism offers an alternative to:

> *scientistic forms of positivism concerned with regularities, regression-based variables models, and the quest for law-like forms; and also the strong interpretivist or postmodern turn which denied explanation in favor of interpretation, with a focus on hermeneutics and description at the cost of causation. (http://www.asatheory.org/current-newsletter-online/what-is-critical-realism)*

The Critical Realist approach posits that to reach an understanding of reality, a continuous search for truth is necessary, while acknowledging that all observation and measurement is potentially fallible. Consequently,

the critical realist questions whether any reality can be known with certainty and emphasis is placed on multiple measures, observations and data triangulation.

Proponents of critical realism include Bhaskar (1975), Archer (1982) and Gorski (2008) who offer differing perspectives on the nature and operation of the social world. Bhaskar's critical realism (2008) brings into focus a continuous tension between structure and agency, while Archer *et al.* (2016) also consider the underlying forces within society, including causation, agency and structure. In terms of this inquiry, structure (a reality independent of the researcher and participants) can exist within the research locations and be understood through the networks of formal and informal relationships, practices and procedures that the research locations encompass. Agency may be understood as the actions of individuals or 'agents' within the structure, whereby they seek to change the existing structure of relationships, practices and procedures.

Structure is understood to predate agency, as agency acts upon structure, but within the works of Bhaskar (1975), Durkheim (1952 [1897]: 38) and Archer (1982), the interrelationship between structure and agency can be seen as cyclical, constantly forming and reforming. Critical Realism is an appropriate lens for viewing the interactions between individuals and social structures. However, it would not facilitate engagement with the deeply personal meanings that online social contact can hold for extra care tenants.

Assumptions about extra care tenants

Post-Positivist approaches indicate that impressions of reality can be fallible and data from multiple sources, which is subject to reappraisal, is required to reach an understanding of reality. The design of this inquiry, drew on Turner et al., (2007), Burholt et al., (2013) and my own foreknowledge of the research area, to make some initial assumptions about extra care tenants' social internet use:

- ICT skills within a population of extra care tenants may range from experienced to novice users

- Extra care tenants may encounter physical, psychological and emotional barriers to internet uptake

- Extra care tenants have the opportunity to socialise with other tenants, while maintaining their own social network

- The internet may provide extra care tenants with a means of maintaining their social contacts, outside their housing scheme

In making the initial assumptions, above, I accepted that my sources of knowledge may be flawed or incomplete and my perception of reality may be subject to temporal change. The participants' perceptions of the reality of online social contact would differ between themselves and from those of the researcher and others. This study required a philosophical approach which gave weight and careful consideration to each participant's experience of the reality of online social contact. Critical Realism was not considered to be appropriate and an alternative approach, within the Post-Positivist paradigm, was therefore necessary.

Constructivism

Constructivism is a broad philosophical framework, encompassing a group of approaches to knowledge, which have in common the view that knowledge is constructed by individuals to give meaning and order to experience. Schwandt (1999) advises that:

> *... constructivism means that human beings do not find or discover knowledge so much as construct or make it. We invent concepts, models, and schemes to make sense of experience and, further, we continually test and modify these constructions in the light of new experiences. (p. 125)*

Thus, as experience grows, knowledge is re-evaluated and its meaning may be changed, following interaction between the researcher and the participant. Denzin & Lincoln, (2005) contend that:

> *The constructivist paradigm assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and respondent cocreate under-standings), and a naturalistic (in the natural world) set of methodological procedures (p. 24).*

Social constructivism is a constructivist approach which may be used to illuminate the process of learning and consequently have relevance, in this inquiry, to the participants' learning process of internet use. The social constructivist holds that knowledge is socially acquired, contextual, built on previous knowledge and requires time and reflection to be assimilated. Vygotsky, (1997) contends that learning can be based on social relationships and takes place as teacher and student interact, in a learning environment. As the student engages with a learning activity, socially constructed knowledge becomes transferred to, and owned by, the student. While the social constructivist approach resonates with the educational element of this inquiry, the participants' acquisition of knowledge was not the main focus. I sought to understand the meanings of the participants' experience of online social contact and to interpret those meanings to understand their experience. Consequently, the constructivist and social constructivist approaches were not adopted as a philosophical basis for this inquiry.

Interpretivism

Within an Interpretivist paradigm, reality is held to be individually and socially constructed and experience is understood within its context. Seen through an interpretivist lens, multiple equivalent realities can exist and different perceptions of individual reality can emanate from different cultural perspectives, world views, life experiences and states of mind. Rossman & Rallis (2017) contend that with an Interpretivist approach:

> *the goal here is to describe and interpret how people make sense of and act in their worlds (p.31).*

while O'Reilly (2012) comments that with Interpretivism, the purpose is not to construct knowledge or meaning, but to gain knowledge of the world through approaches which:

> *rely on interpreting or understanding the meanings that humans attach to their actions (p.2).*

Scotland (2012) contends that Interpretivism '*aims to bring into consciousness hidden social forces and structures' (p.12).* which resonates with this inquiry, where the participants are extra care tenants, whose

voices are infrequently heard. Rossman and Rallis (2017) advise that within an Interpretivist paradigm, social reality is created through individual perceptions and experience which are temporally evolving (p.29). The individual thus interprets and reinterprets experience as circumstances change, with the meaning of social reality thus being continually in transition.

An Interpretivist stance was considered appropriate for this inquiry, as I sought to understand and interpret the participants' experience of the reality of online social contact, recognising that for the participants, this reality would evolve with their online experience and as their internet skills developed. Each participant would understand reality through the lens of their personal history and their own lifeworld of extra care housing. Consequently, reality would be different and changing for each participant. The Interpretivist tradition encompasses a sensitivity to the research context and is appropriate for addressing the research aim, which is to explore the meaning of online social contact, together with the setting in which it occurs. Carcary (2009) notes that Interpretivism is suitable for an inquiry located in a complex social setting, since it offers the opportunity to gain a deep understanding of a topic and enables contextual depth and detailed, nuanced descriptions to be captured.

An Interpretivist approach to this study would enable me to access the participants' experience of online social contact, within the complex social fabric of their daily lives as extra care tenants. Clarkson (1989) emphasises that an awareness of the context is essential in understanding the complexities of participants' social and material worlds.

> *People cannot be understood outside of the context of their ongoing relationships with other people or separate from their interconnectedness with the world.(p.16)*

Detailed and nuanced descriptions of the participants' experience of online social contact and an understanding of the social and organisational context of extra care housing were required to address the research aim (See p.7). An Interpretivist approach would enable me to understand the participants' social environment and the meaning of their social internet use, within that context. Consequently, an Interpretivist approach was

adopted and an appropriate methodology was sought to complement the Interpretivist paradigm.

Research Methodology - A Phenomenological Approach

The participants' reality of online social contact was understood to be a subjective experience, held by the participants, within their consciousness. To enable me to enter the participants' consciousness and explore, with them, their world of online social contact, a phenomenological approach was considered. Phenomenology encompasses both a philosophical tradition and a range of qualitative methodologies (Moran, 2000; Kafle, 2011; Gill, 2014). As a methodological approach, phenomenology can be combined with qualitative methods of data collection, to enable the researcher to access participants' feelings and perceptions of research issues (Laverty, 2003; Langdridge, 2008). Adopting a phenomenological approach, researchers recognise that each participant's lifeworld is unique and give careful attention to the voiced experience of the participants, to understand the world from each participant's perspective.

In considering phenomenology as the methodology for this inquiry, it was envisaged that a prolonged engagement with the participants would be required. This would allow a trusting relationship to be established and enable the participants to share their views of online social contact, as they evolved. Longitudinal inquiries, involving a prolonged engagement with older adults, include studies of loneliness among older individuals (Dykstra *et al*, 2005; Cacioppo *et al*, 2006; Newell *et al*, 2014). Shaw *et al.* (2016) adopted a phenomenological approach to a longitudinal study of extra care tenants' experience of daily life, remarking that prolonged engagement allowed trust to develop and participants' views to be shared with the researchers.

The development of phenomenology

Husserl (1900; 1913; 1932) is generally accepted as the founder of phenomenology. He and his successors in the Husserlian tradition of

phenomenology (Giorgi, 2009; Merleau-Ponty, 1962) contend that the world, and the phenomena within it, can be known through a focussed interrogation of descriptions of the phenomena of interest. Following the Husserlian approach, the researcher would set aside any prior knowledge of the phenomenon of interest, listen attentively to the participants' descriptions and then seek the essence of the phenomenon, through a detailed study of the participant's words. After interrogating the texts from a series of interviews, the researcher would then articulate a structure for the phenomenon of interest:

> *based upon the essential meanings derived from the participants' descriptions (Kleiman, 2004, p.6).*

The outcome is a richly detailed, structured description of the phenomenon being researched. As a pre-requisite to seeing a phenomenon clearly, Husserl (1913) advocated the need to 'bracket out' the context of the phenomenon and any preconceptions, on the part of the researcher, in order to reach a clear view of the essence of the phenomenon. This process of bracketing out context and preconceptions is central to the Husserlian approach (Laverty, 2003). Husserl's approach has subsequently been adopted and developed by successors (Giorgi, 2009; Colaizzi, 1978; Merleau-Ponty, 1962) and is also referred to as 'descriptive phenomenology'.

The Husserlian approach to phenomenology was of interest, as it could provide a structured description of the participants' perceptions of online social contact. An intense phenomenological focus on the participants' words could potentially provide new knowledge of their world of online social contact. However, a description of the participants' experience would not provide an understanding of the meaning of the experience for the participants or locate the experience within its context. The derivation of meanings from an interpretation of the participants' words, was beyond the scope of descriptive phenomenology.

The process of bracketing out prior knowledge of the research issue also seemed difficult to sustain. Foreknowledge of older adults' use of the internet for social contact had motivated me to undertake the inquiry.

There could be circumstances when my experience would be helpful to the inquiry and the opportunity to draw on this experience would be lost if foreknowledge of the research issue were 'bracketed out'. A phenomenological approach was therefore required, whereby participants' experience was interpreted, to enable the meanings to be understood and researchers' foreknowledge could be used to enhance understanding.

Interpretative phenomenology: understanding the meaning of the participants' experience

Husserl's (1913) descriptive phenomenology was adapted by Heidegger (1927) and his successors, Gadamer (1975) and Ricoeur (1976), who took an interpretative approach, creating knowledge based on an understanding, rather than an intense description, of the research issue. While Husserl's descriptive method could be used to focus on the essence of a phenomenon, providing a clear vision of 'the things in their appearing', Heidegger sought to understand the meaning of a phenomenon for an individual and this required an interpretation of the individual's experience.

Langdridge (2007) advises that the focus of interpretative phenomenology is to study "things" as they are perceived and experienced by individuals, in the context of their understanding of their own world. Kleiman (2004) notes that with an interpretative approach, the researcher listens intently to the participants' descriptions of the phenomenon but the purpose is to arrive at an understanding of the participants' experience of the phenomenon and to represent this in text. During this process, the researcher will draw on prior knowledge, experience and the research context to clarify meanings. Interpretative phenomenology was considered an appropriate methodology to address the aims of this study, as it enabled me to access and understand the participants' experience of online social contact and offered the potential to enhance understanding, by drawing on the context of extra care housing and my fore-knowledge of extra care tenants' use of the internet.

The influence of personal histories on perceptions of the present

The challenge of interpreting an individual's words and eliciting the meanings from their written and spoken texts has been addressed by philosophers throughout history (Aristotle, c350 BC; Schleiermacher, c1790; Dilthey, 1883/1990, Heidegger, 1927; Gadamer, 1975; Ricoeur, 1976). Heidegger (1927) contended that Dasein, the focus of his search for the meaning of existence, exists within the enmeshed recollections of past realities and their potentialities, drawn through to the present and projected as anticipations of the future. Thoughts about temporality resonate with this study, as each participant experienced online social contact through the prism of their personal biography and in the context of their daily life as an extra care tenant.

Heidegger's (1927) approach to temporality, was developed and extended by Gadamer (1975) who argued that people have a "historically-effected" consciousness, which embeds them in the history and culture of their times. Therefore, most participants in this inquiry, would understand online social contact, through the lens of their personal history of life in north east England during the 1930s, World War 2, and the years that followed. I was aware that my consciousness drew on other perceptions of place, history and popular culture, due to differences in age and personal biography. This could create a barrier to understanding the participants' experience of social contact over the internet. To overcome this potential barrier to understanding, I decided to adopt a hermeneutic approach to interpretative phenomenology, as the methodology for this inquiry.

Adopting a hermeneutic interpretative phenomenological approach

As the researcher, I wished to reach an in-depth understanding of the participants' experience of online social contact, and to access the feelings and perceptions of the experience, held in the participants' consciousness. The desired outcome of hermeneutic interpretative phenomenology is for the researcher and participant to reach a shared understanding of a

phenomenon; an outcome Gadamer (1975) describes as a 'fusion of horizons'. When hermeneutics is used to illuminate the meanings of participants' spoken and written texts, this is achieved through a cyclical process of engagement, interpretation, reflection, clarification and reinterpretation, whereby the participants' meanings emerge and become clear to the researcher, who also moves between a consideration of the parts and the whole of the text, and back again, until an understanding of the participants' meanings is reached. In this context, the 'text' refers to the participants' spoken and written words, with spoken words transcribed as text and explicated, along with the written text of the participants' diaries. (See Chapter 5, pp. 98-99, pp.101-102 for participant diaries, pp.108-111 for data explication)

The researcher's understanding of the whole text depends on understanding the parts and the parts are understood through an understanding of the whole. This procedure of returning to the text and reflecting upon it, and moving between the parts and the whole, is known as the hermeneutic circle. The hermeneutic approach to the interpretation of the text and the clarification of the participants' meanings, is thus complex and cyclical and an extended engagement is needed to ensure that meanings are understood. The adoption of a hermeneutic, interpretative, phenomenological methodology enabled me to reach an understanding of the participants' experience of online social contact. This was achieved through a cyclical process of engagement, exploration, reflection and clarification of the meanings of the text, until I shared the participants' understanding of their life world of online social contact. (A clarification within an interview is indicated on p.111, while enhanced understanding, achieved through a series of interviews, is indicated on pp.75-76).

This approach has been adopted in other gerontological studies. Allan & Dixon (2009) adopted a hermeneutic phenomenological approach in a study of older women's experience of depression, while Narushima *et al.*, (2017) adopted hermeneutic phenomenology to understand vulnerable older adults' experiences of learning in later life. In both studies, researchers advised that the methodological approach was selected to

enable them to share an understanding of the participants' lived experience of the research phenomenon.

The participants' experience of their Lifeworld and 'Things' within it

The term 'lifeworld' is widely used in the phenomenological literature. It stems from the later works of Husserl (1939/1970) and was subsequently used in interpretative phenomenology to describe the world of an individual's lived experience including the context and the beings and objects within it. Langdridge (2008) suggests the lifeworld is:

> *the world as experienced – as lived – rather than a world separate from people experiencing it (p.3).*

Vietta's (1951) commentary on Heidegger (1927) also reflects on the lifeworld, or the everyday world of beings, objects and familiar experiences. Vietta (1951) contends that this world is the context for the perception of meaning in daily life, stressing the significance of the context in reaching an understanding of 'Things'.

> *Things stand in an all-embracing context of meaning: the "world" which reveals itself to man in the understanding (p.159).*

Drawing on Horrigan-Kelly *et al* (2016), Vietta's (1951) 'Things' are 'objects,' which are understood jointly with beings and their setting, to form one unified 'world', entity, or experience. Horrigan-Kelly *et al* (2016) argue that 'understanding' is closely interwoven with the interpretation of the context and the entities within it. Interpretation, they contend, is the process of making explicit, that which was already implicit in 'understanding' (p.3). Understanding and interpretation may therefore bring into view the constituent elements of daily life and the means whereby they constitute the 'whole'. For the participants, Vietta's (1951) 'context of meaning' can be understood as each participant's perception of their extra care housing scheme, a context inhabited by 'things' and beings, which together with the context, comprise the everyday reality in which the participants' experience of online social contact is situated.

Heidegger (1967) references ‘things’, as objects, ready-to-hand and potentially of interest or concern for the individual. Within the context of this inquiry, ‘things’ may include technological equipment such as computers and other digital devices. Their presence in the participants’ lifeworld may demand the participants’ attention and through a phenomenological lens, the participants’ perceptions of technological ‘things’ or digital devices can be explored. The materialities of the physical positioning and the care given to ‘things’, can additionally provide a non-verbal expression of the participants’ feelings towards those ‘things’. Heidegger refers to ‘things thinging’ whereby ‘things’ have a presence of their own and have the potential to gather other entities to them. The potency of digital devices and their potential to engage older individuals in unfamiliar activities was remarked upon by older people participating in computer groups which I was teaching.

Gadamer (1975) also considers the relationship between individuals and ‘things’ or objects. He contends that while the individual observes and assesses an object, its presence may also raise questions for the individual, in terms of their openness to new ‘things’ and experiences. The nature of the individual’s response to an object may illuminate an aspect of their personal history and through it, the individual’s sense of self and their place in the world. Gadamer (1975) argues that an object or experience may draw in an individual, changing their consciousness, once they become engaged with it. He contends that in playing a game, the player becomes part of a wider experience, whereby the game draws in the player, and the player’s consciousness is changed for the duration of the game. In this study, Gadamer’s (1975) view of game playing and Heidegger’s (1967) observations on ‘things’ were adopted as models for understanding the process of participant engagement with an internet enabled computer. Older individuals had previously advised that they were ‘drawn in’ by the internet, ‘losing track of time’ while they were immersed in the online world.

In the lifeworld of an extra care tenant’s flat, a computer with an internet connection may stand idle, while being ready-to-hand in the tenant’s presence. The computer is available for use and has its own potentialities,

however, the decision to use the computer to communicate over the internet lies with the individual user. Once the decision is made, the experience of online communication 'transforms the experiencer' as the user and computer become jointly engaged in the endeavour. As the engagement in online communication continues, the user may experience a number of positive, negative or neutral feelings. These feelings may continue, independently of the computer, after the internet session ends, and, in some situations, the user may be changed by the experience.

In this study, the participant's feelings throughout the preparation, anticipation, experiencing and reflection on the experience of online social contact were understood to be both contained within and separate from the participant. They were held within the participants' consciousness and could be accessed, by the researcher, within the context of a trusting relationship. Phenomenology can provide an approach which enables access to and understanding of the range of feelings the participant may experience when using the internet for social contact. To further this understanding, a hermeneutic, interpretative phenomenological methodology was adopted, drawing on Heidegger (1927; 1967; 1971) in respect of the presence of technological 'things' and Gadamer (1975) to understand the process of the participants' engagement in online social contact.

The strengths of phenomenology

Lester (1999) advises that phenomenology, combined with appropriate methods, provides an opportunity for participants to articulate their experiences, in depth, and for the researcher to give time and pay close attention, to each participant's voice. I sought to understand the meanings of the participants' experiences of online social contact, a process which would involve an interpretation of the participants' data. Marshall & Rossman (2011) describe phenomenological approaches to research as seeking:

> *to explore, describe, and analyse the meaning of individual lived experience* (p.19).

They quote Patton (2002) who advises that the phenomenological approach gives the researcher access to individuals' thoughts and feelings about their lived experience:

> *how they perceive it, describe it, feel about it, judge it, remember it, make sense of it and talk about it to others (p.104).*

Patton's (2002) comments indicate that a phenomenological approach should enable me to access appropriate data to interpret the participants' experiences and address the research question.

Reaching a broad understanding of the participants' everyday world was also a requirement for this inquiry. The meaning of online social contact was to be understood within the context of extra care housing. Consequently, while the participants' view of using the internet for social contact was required, to address the research question, there was also a need to understand the participants' world of daily life as an extra care tenant. Finlay (2001) states that entry into the participants' everyday world is the focus of phenomenology, while Kvale (1996) contends that the purpose of phenomenology is to reach an understanding of the participant's world, from the participant's perspective. Thus, a phenomenological approach should facilitate understanding of the participants' world of online social contact, as they perceived it, in the context of daily life as extra care tenants, and to derive the meanings of the experience through engagement with the participants.

Enabling the voices of under-researched groups to be heard

Lester (1999) highlights another strength of the phenomenological approach, contending that phenomenology is appropriate for exploring feelings and experiences which may otherwise remain hidden. He argues that phenomenology gives a voice to those who may otherwise be unheard. This suggests that phenomenology is particularly appropriate where an inquiry relates to a population, such as older internet users, which has been identified as being under-researched (Matthews & Nazroo, 2015). The limitations of current knowledge of older adults' experience of online

social contact and the requirement to gain a more nuanced understanding of the complexity of older adults' and more specifically extra care tenants' experiencing of the internet is outlined in Chapter 3, Literature Review, (pp.50-55) and is a motivator for this inquiry.

Some older individuals had remarked that they had feelings of being 'overlooked' or 'left out' of conversations, when a group comprising younger relatives or friends, spoke together. Speaking prior to this study, they had commented that as they became older, they felt their views were set aside by others. Lester (1999) advises that:

> *phenomenological approaches are good at surfacing deep issues and making voices heard (p.4).*

His comments seemed to resonate with the focus of this inquiry, as Burholt *et al,* (2013) had also found that some tenants can feel a loss of agency and self-confidence, following a transition to extra care housing. Phenomenology was therefore considered to be an appropriate methodology, to ensure that the participants' voices were heard. However, in keeping with Shaw *et al,* (2016), a prolonged engagement was anticipated, to enable the participants to build sufficient confidence in the research process, to articulate their online experiences. To facilitate a process of discussion and reflection, the Seidman (2006) model for phenomenological interviewing, which comprises a series of three in-depth interviews, was adopted for this inquiry. (See Chapter 5 Research Methods, pp.97-99).

The contribution to understanding of the researcher's own experience

Descriptive phenomenologists (Husserl, 1912; Giorgi, 2009) argue that the researcher must set aside prior understandings of a phenomenon to arrive at the essence of an experience. However, within a hermeneutic framework, the researcher's personal experience is not necessarily viewed as an impediment and in some approaches, the researcher's pre-understandings of a phenomenon are actively embraced. Gadamer (1975) asserts:

> *To try and eliminate one's own concepts in interpretation is not only impossible, but absurd. To interpret means precisely to use one's own preconceptions so that the meaning of the text can really be made to speak for us (p.358).*

As an ICT tutor and the researcher for this inquiry, I held some pre-understandings of the meanings of online social contact for the participants. Equally, these pre-understandings may differ from the reality of the participants' perceptions of the phenomenon. Within the hermeneutic process, opportunities for dialogue, between the researcher and participants, enable the participants' voices to be heard, as their perceptions also change. Text can be modified, clarified and reinterpreted, as the participants' knowledge and experience of online social contact evolves over time. Thus within the framework of a longitudinal study, with a hermeneutic, interpretative phenomenological methodology, it was anticipated that the evolution of the participants' perceptions of online social contact could be captured.

Movement towards understanding between researcher and participants

With a hermeneutic approach, understanding does not rest on a single interpretation of a text. It is an ongoing process which evolves through a series of interactions between the researcher and the participants or the researcher and the text itself. Gadamer (1975) quotes Heidegger (1927) in warning the researcher against 'arbitrary fancies' and 'imperceptible habits of thought' which can divert attention from a clear understanding of 'things as they are themselves'. In this study, 'the things as they are themselves' are the meanings that extra care tenants attribute to online social contact, expressed in spoken language during in-depth interviews or in written text, such as diary entries. Davis (1991) referencing Swingewood (1984) advised:

> *the meaning of things is not inherent in objects, but is actually located in the individual's inner life... The researcher's task is to understand reality as it is, actively and consciously created by subjects, not as a pure entity that exists 'out there' (p.5).*

Key to understanding the meanings which the participants attribute to their experience of online social contact, will be their articulation of their perceptions of reality from the perspective of their own lifeworld.

Gadamer (1975) argues that the researcher approaches the task of understanding the reality located within an individuals' consciousness, with an idea or 'fore-project', which represents the researcher's initial expectations of the outcome. This 'projection' is constantly revised as the researcher penetrates the meanings of the participants' speech or written texts. Gadamer (1975) contends that 'methodologically conscious understanding' involves forming anticipatory ideas, being aware of these ideas and testing them to *'acquire right understanding of the things themselves' (p.239).* To eliminate 'arbitrary fancies' or misconceptions, ongoing dialogue is necessary between researcher and participant. This process enables the researcher to interpret the participant's presentation of their lifeworld, which, in turn, has been interpreted by the participant, in presenting it to the researcher. Within the hermeneutic framework, dialogue, clarification and a movement of understandings takes place between the researcher and participant, as their engagement continues. This movement brings their understandings together and enables the participant's experiences to be known to both the participant and the researcher, with the emergence of new understandings of the reality of the participant's experience.

Application of the philosophical approach in this study

The hermeneutic, interpretative phenomenological approach to this inquiry, informed the study design, recruitment, data collection, explication, and interpretation of the findings. The study was designed, adopting Gadamer's hermeneutic approach, combined with the Heideggerian concept of 'things thinging', to facilitate understanding of the participants' experience of online social contact. Consequently, a purposive sample of extra care tenants, with experience of the research issue, was recruited and a series of in-depth, semi-structured interviews,

and participant diaries, fostered engagement with the participants, for an extended period. The interviews and diaries enabled the participants to share their lifeworlds and to voice their deeply held views of online social contact, in the context of their life as an extra care tenant. The hermeneutic, interpretative approach enabled me to draw on, and subsequently revise, my pre-understandings of the participants' experience, as a cycle of dialogue and data clarifications with the participants, led to a new shared understanding of the participants' experiences of online social contact.

The following extracts from a participant's written interviews (a method of data collection used to overcome her speech difficulties, pp.106-107) illustrate the application of a hermeneutic methodology and illuminate progression and personalisation in the participant's use of the internet for social contact. My understanding of the participant's appropriation of social internet use, to address her own circumstances, deepens through the series of three interviews:

> *Written Interview 1*
>
> *R. Do you ever use technology for instance a telephone, mobile phone, or e-mail to contact people?*
>
> *P Use telephone only. Have mobile phone but can't use it*
>
> *R How would you feel about using the internet eg email to contact people?*
>
> *P Lack of confidence is part of the anxiety which is with me all the time. Part of it is connected with the shaking which gets worse as the anxiety develops. If I was on my own on computer and made a mistake I feel I would just sit and shake and not be able to correct it.*
>
> *Written Interview 2*
>
> *R Now you have been getting emails for a few weeks, do you have any more thoughts about receiving emails from friends & family?*
>
> *P Emails are sometimes in response to telephone calls. I ask people to send me an email when they phone on Sunday. 'Emma' and 'Gloria' phone on Sunday. I ask if they are able to send it[an email] for Monday. This week I was better at replying because there were so many I wanted to do it quickly.*
>
> *Written Interview 3*
>
> *R Now you have more experience, how do you feel about sending and receiving emails?*

P I have found sending emails both useful and interesting. They have enabled me to maintain contact with people that I could not have found by any other means and this has been very helpful. I think with practice my technique is improving and the answers don't need so long to compose.

The Monday email to 'Emma' is a useful continuation of our Sunday telephone call especially like yesterday when anxiety takes over and I can't talk any more.

In this series of written interviews, the participant's transition from being fearful of technology, to becoming a more confident internet user, becomes clear. The hermeneutic approach enabled details to emerge clarifying the participant's adoption of emails, in combination with telephone calls, to address her speech difficulties. Over the series of three interviews, dialogue with the participant deepened our shared understanding of her experience of appropriating communications technology to meet her own needs. (See also pp.66-67, pp.105-107).

Summary

To explore the meanings of extra care tenants' experience of online social contact, a methodology was required to facilitate access to the participants' subjective experience of social internet use. An interpretative hermeneutic, phenomenological approach, drawing on Heidegger (1927) and Gadamer (1975) combined with qualitative methods, was thought appropriate. A hermeneutic approach is suitable for a longitudinal study, as it involves the researcher and participants in a cyclical process of dialogue and clarification, whereby the perspectives of the researcher and participants come together, enhancing understanding. An interpretative approach allows the researcher to draw on pre-understandings and context, to further enhance understanding of the research issue. Thus, the adoption of an interpretative, hermeneutic, phenomenological methodology would enable me to access the participants' lifeworld of social internet use, drawing also on my experience as an ICT tutor, and the context of extra care housing. Phenomenology privileges participants' voices, ensuring each participant can be heard. In terms of this inquiry, it had the advantage of privileging the voices of an under-researched population and bringing their perceptions and concerns to the fore.

Theoretical framework

The selection of the research paradigm and the methodological approach for this inquiry was discussed earlier in this chapter. A theoretical framework was also required, to draw on logical, organised understandings, to illuminate the participants' experience of online social contact. To address the research aim, theory would be drawn from the areas of gerontology, ICT and self-development.

The significance of theory, for knowledge creation, is supported in the literature, as Morse & Field (2002) advise:

> *Theory forms the basis of knowledge development as critical concepts and constructs are identified and relationships between them demonstrated (p.5).*

They note that theory is a stage in understanding, prior to knowledge, and is therefore subject to testing, review and change. Glaser & Strauss (2017) suggest that a requirement to verify theory should not de-emphasise the prior step of discovering which concepts and hypotheses are relevant for the area of research (p.2). Consequently, the research area was reviewed to identify appropriate theory. Morse & Field (2002) suggest that since theory is derived from the proponent's *'current knowledge base and personal reality'*, it may be influenced by the proponent's perceptions and understandings. They add that theory may be temporally situated and, consequently, limited in its application. Nonetheless, a theoretical framework was created for this study to access understandings across the field of research and potentially make connections between data which could otherwise have been missed.

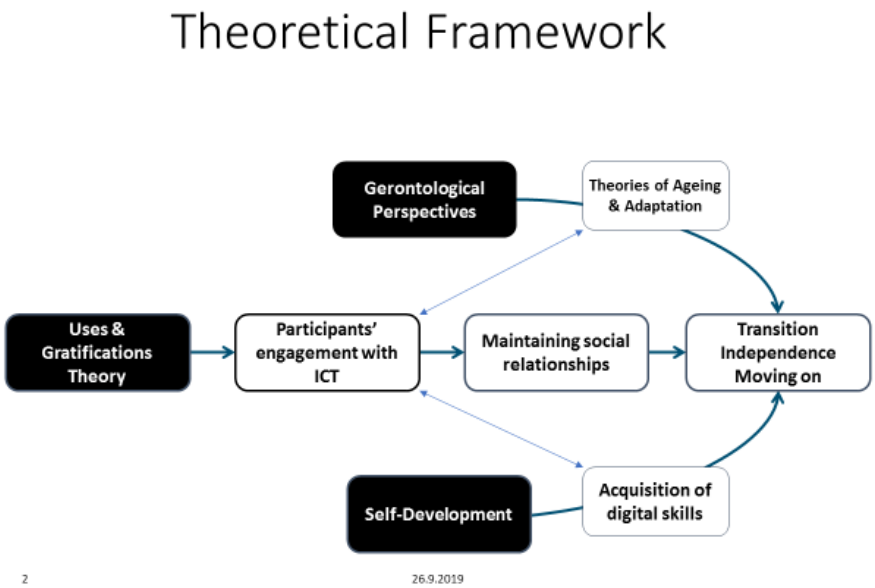
Wadensten (2006) suggests that theory may account for or characterise a phenomenon, adding that the characterisation may be partial:

> *a theory is like a map; it highlights those parts [of a phenomenon] that are important for its given purpose. But no map (or theory) reflects all that is contained within the phenomenon.(p.348).*

As Wadensten (2006) indicates, the use of theory is selective and its exposition of a phenomenon may be incomplete. However, the focus of this inquiry was to achieve a deep understanding of the participants'

experience of online social contact. Consequently, theoretical approaches were drawn from a range of sources, primarily gerontology, internet-based communications, learning and self-development. The aim was to facilitate an interplay between theoretical understandings, data and emerging ideas, with the potential to suggest new meanings for the research issue. The theoretical framework underpinning this study is illustrated in Figure 1 below. The contribution of these theoretical perspectives, to the exploration of the participants' experience of online social contact, is then discussed.

Figure 1 - Theoretical Framework of the study



Gerontological perspectives

As this research is focussed on the experience of older adults, theoretical approaches to the experience of ageing were required. These were principally drawn from gerontology, the multi-disciplinary study of the process of ageing which considers a range of issues affecting older people. Gerontology, as a discipline, includes biological perspectives of ageing (Waters & Kariuki, 2013), psychological approaches (Mogle & Sliwinski, 2008), sociology (Carstensen, 1991) and philosophy (Fingerman *et al.* 2013), providing an opportunity to comprehend the diverse aspects of

ageing. Smith (2014) cites Ruiz (1990) who brings these elements together, contending that:

> *Gerontology integrates the biology of aging, the psychology of coping, and the social science of living in an environment that is unique for each individual (p.8).*

To address the research question and reach an understanding of the participants' experience of online social contact, an appreciation of older adults' experience of their social roles and relationships was sought. Many authors have proposed theoretical approaches to the social worlds of older adults (Atchley, 1989; Carstensen, 1991; Baltes & Carstensen, 1996; Erikson, 1980; Havighurst, 1963; Hochschild, 1975; Tornstam, 1989). Theoretical models of older adults' adjustments and adaptations, to accommodate age-related change, were also considered (Cumming & Henry, 1961; Atchley, 1989; Havighurst, 1963; Baltes & Baltes, 1990; Arber & Ginn, 1991; Bryant, 2000). Some models of adaptation (Arber & Ginn, 1991; Bryant, 2000) draw on the social resources of older adults and were of particular relevance.

The psychosocial theories of ageing

Wadensten (2006) advises that among the theories of ageing, the psychosocial theories of ageing are of interest, as an:

> *attempt to explain human development and ageing in terms of individual changes in cognitive functions, behaviour, roles, relationships, coping ability and social changes (p.289).*

It can also be argued that the three main psychosocial theories of ageing - disengagement theory (Cumming & Henry,1961), continuity theory (Atchley, 1989) and activity theory (Havighurst, 1963) offer differing but complementary insights into older adults' social worlds. The theories provide a means of exploring older individuals' engagement with social groups, roles and relationships. Bringing together the three theories, as underpinnings for this inquiry, facilitated the consideration of individual social engagement along a spectrum, where disengagement theory indicates the older individual's withdrawal from social activities, continuity theory indicates the individual's adaptation to change from within the structures of their existing social activities, while activity theory

posits the need for older adults to maintain social roles and relationships at an equivalent level to those of middle age, to maintain their wellbeing in older age.

Burton (1974) considering the functions of theory, states that theory can initiate dialogue, and that two competing theories can stimulate debate. Knapp (1975) advises that disengagement theory and activity theory do not compete with each other and argues that reliable evidence has been found to support the veracity of both theories. The range of perspectives provided by the three main psychosocial theories of ageing appeared to be capable of illuminating aspects of the participants' experience of social internet use and are presented and discussed below.

The Disengagement Theory of Ageing

The Disengagement Theory of Ageing posits that advancing age leads to:

> *an inevitable mutual withdrawal or disengagement, resulting in decreased interaction between an ageing person and others in the social systems he belongs to (Cumming & Henry1961:14 in Hochschild, 1975).*

Cumming & Henry (1961) contend that social disengagement may be initiated by the older individual, by society, or jointly by both. They argue that withdrawal is beneficial to the individual, who is then freed from social norms, obligations and constraints. They further contend that society also benefits, since the death of the older person will be less disruptive, as the individual has already withdrawn from many social structures. Hochschild (1975) argues that a weakness of Cumming & Henry's (1961) analysis is that *'they ignored the meanings actors attach to what they do'* (p567) and while disengagement theory offers a rationale for withdrawal from social society, there is little recognition of any confliction, loneliness or loss which a disengaged individual may experience.

While disengagement theory may appear, initially, of limited relevance to a study of older adults' social internet use, nonetheless, the theory can provide useful insights. Social internet use is primarily understood as a means for individuals and groups to 'keep in touch'. However, the

adoption of online social contact may also enable older individuals to disengage from social relationships, by reducing their physical presence, if, for example, face-to-face contact becomes too demanding. Reflection on the tenets of disengagement theory, in the light of the data, may enable unexpected findings to emerge, and perhaps, counter-intuitively, online social contact may be route to partial disengagement.

The Activity Theory of Ageing

The activity theory of ageing offers an alternative perspective on older adults' social worlds. The theory is closely associated with the work of Havighurst & Albrecht (1953), Havighurst, (1961) and Lemon *et al.* (1972) who posit that the continuance of a high level of social activity and social relationships, from mid-life into older age, is necessary for the wellbeing and positive self-image of older adults. Additionally, the authors assert that the potential harms of reduced social activity, mean the loss of social roles should be resisted and any lost roles should be replaced.

However, life transitions associated with older age may lead to the loss of some social roles and older individuals may lose the capacity to maintain a high level of social activity. Atchley (1989) argues that activity theory may become a *'homeostatic or equilibrium model'* seeking, sometimes unrealistically, to counter the effects of change. In terms of this inquiry, age-related change may lead to a transition to extra care housing , with the loss of some social roles for extra care tenants. Restoration of the *'earlier equilibrium'* (Atchley, 1989) in these circumstances, may not be possible, with potentially negative impacts on wellbeing.

Activity theory provided a framework to consider the participants' experience of their social roles and relationships and the contribution of social internet use, to maintaining a high level of social engagement. Activity theory was also used, in combination with the participants' data, and with disengagement and continuity theory, to interrogate whether the same psychosocial theory of ageing would always be applicable to a participant's use of the internet for social contact. I considered whether a participant's use of online social contact might facilitate in some

circumstances, a high level of social engagement and in other circumstances, a withdrawal from social events. This could indicate that participants used online social contact to achieve a more complex range of social outcomes than had been anticipated at the outset of the study. This may have been overlooked without the use of theory.

The Continuity Theory of Ageing

In positing the continuity theory of ageing, Atchley (1989) argues that continuity can be a dynamic, adaptive process which, when applied to individual ageing, draws on biography to facilitate change, in keeping with the older person's character, interests and past experience. This maintains the integrity of the older individual's internal and external constructs, as they move forward in life. Atchley continues:

> *With the introduction of the concept of time, ideas such as direction, sequence, character development, and story line enter into the concept of continuity as it is applied to the evolution of a human being (p.183).*

Thus continuity theory allows for temporal change to occur, while developmental change is managed within a biographically appropriate context. Cuskelly & O'Brien (2013) also note that a strength of continuity theory lies in the opportunity to navigate age-related change within the structure of social roles and relationships from earlier in the lifecourse. Thus, while making age-appropriate adjustments and adaptations, older individuals can continue to operate within the familiar domains of their long-established social worlds. Proponents of continuity theory (Atchley, 1989; Cuskelly & O'Brien, 2013) recognise that change is inevitable but posit that when change evolves from personal biography, the impact can be positive and developmental.

In the context of this inquiry, the application of continuity theory requires clarification, since Atchley posits that the theory is applicable to 'normal ageing' but not to 'pathological ageing', where disease is present. He suggests that transition to retirement communities is 'anomalous', neither 'normal' nor 'pathological'. However, housing transitions may impact the external structures of life, while leaving the internal structures (character, skills and attitudes) intact and can be understood as an adaptive choice by

an individual. Online social contact may also represent an adaptative choice, associated with developmental change. Therefore, continuity theory was applied to this study, to consider whether the participants perceived online social contact as a means of facilitating social engagement, should age-related losses inhibit offline social contact. Online social contact was thus considered as a means to facilitate the continuity of social roles, which may be experienced differently, in later life. The disengagement, continuity and activity theories of ageing can be seen along a continuum of responses and adaptations to social engagement in later life. Purporting to promote the older individual's wellbeing, these theories provided a basis for reflection on the participants' views of online social contact.

Adaptation and agency

While Atchley (1989) characterises the continuity theory of ageing as an adaptive approach to wellbeing in older age, the Arber & Ginn (1991) concept of the 'resource triangle' also appeared, to resonate with the participants' adaptation to age-related change. Arber & Ginn (1991) proposed that older adults progressively mobilise their material, caring and health resources, to manage their lives and maintain their independence, mitigating age-related losses, as they occur. While the Arber & Ginn framework (1991) predates the ubiquity of the internet, digital skills and equipment may be resources which enable participants to mobilise human and material resources, to support their independence. Thus the Arber & Ginn (1991) concept of the resource triangle, led me to reflect on the potential for online social contact to be adopted as an adaptation, enabling participants to find new ways to experience agency, independence, intimacy and self-esteem, through their social relationships (see also Chapter 9, Discussion, pp. 212-213).

Online social contact - uses and gratifications theory

Uses and gratifications theory (Katz, Blumler, Gurevitch, 1974) follows a line of research into the use of mass media which dates back to the 1940s. The theory explores the benefits the individual user derives from their choice of media, portraying the media user as an independent, goal-directed being, achieving objectives through selective use of mass media. The user is seen to have agency and the proponents of this theory relate the choice of media to the fulfilment of needs experienced by the user. While uses & gratifications theory predates the internet, subsequent researchers (LaRose *et al.,* 2001; LaRose & Eastin, 2004; Malik *et al.*, 2016; Phua *et al.,* 2017; Pang, 2018) have adopted the theory as a framework for understanding social internet use, more recently in terms of the use of social media applications. Gratifications attributed in the literature, (McQuail, Blumler & Brown, 1972; Katz, Blumler, Gurevitch, 1974) to media use, vary among researchers but generally include self-affirmation, companionship, instrumental activities, escapism, surveillance and entertainment.

Applying media uses and gratifications theory to this inquiry, led me to consider whether a single exchange of emails may provide participants with multiple gratifications, deriving from technology use, social connection and media content (see Chapter 1, p.6). Potential gratifications from the use of more than one internet application, over an extended timeframe, may be more extensive. Consequently, uses and gratifications theory provided a starting point for an in-depth exploration of the meanings the participants attribute to their own social contact online, from the perspective of media use.

Theories of self-development

Carstensen *et al.* (1999) suggest that older individuals will focus on short term emotional satisfaction, losing interest in self-development, when their remaining lifespan is perceived to be limited. However, theorists concerned with self-development and self-fulfilment (Maslow, 1943;

1968; Max-Neef, Elizalde & Hopenhayn, 1991) have provided a framework for understanding older adults' continued wish to reach their full potential as they progress through life.

Through his study of motivation, Maslow (1943; 1968) contends that the satisfaction of human needs is hierarchical. Physical, social and self-developmental needs are met through a hierarchical progression towards self-fulfilment. In terms of this inquiry, extra care housing can provide for the participants' lower level needs for food, shelter, physical security and social interaction. However, the satisfaction of higher level needs, for intimacy, affection, esteem and self-fulfilment, would require the participants to extend their boundaries beyond everyday life as an extra care tenant. Ivtzan *et al.,* (2013) have indicated that progress towards self-fulfilment will generally increase with age. Consequently, an aspiration to make contact online, may have led the participants into situations where their higher level needs would be addressed, initiating independent action, stimulating meaningful activity and securing intimacy in long-term relationships. Thus online social contact had the potential to satisfy several higher-level needs and support the participants' progress towards self-fulfilment.

Max-Neef, Elizalde and Hopenhayn (1991) adopted a non-hierarchical approach to the satisfaction of fundamental human needs, contending that with the exception of the need for subsistence, all other fundamental needs are interconnected and there is no hierarchy of needs to be satisfied. This led me to consider whether the interplay between the need for Being, Having, Doing and Interacting and the need for Subsistence, Protection, Affection, Understanding, Participation, Creation, Leisure, Identity and Freedom can lead to circumstances whereby *'simultaneities, complementarities and trade-offs'* are all characteristics of the process of needs satisfaction. (p3). A single 'satisfier' could, potentially, fulfil many Fundamental Human Needs. Therefore, I also used this framework to consider whether online social contact could satisfy the need for Having, Doing and Interacting, by providing opportunities to experience Affection, Understanding, Participation, Creation, Leisure and Identity. It could also

be argued that the needs identified by Maslow (1943:1968) have much in common with the needs identified by Max-Neef, Elizalde and Hopenhayn (1991) with the process of satisfying needs being a differentiator between their approaches.

Learning in later life

Learning in later life introduces an additional lens for the consideration of the participants' experience of online social contact. It can be framed within the construct of successful ageing (Baltes & Baltes, 1990; Baltes & Carstensen, 1996; Tam, 2011; 2013) and has positive implications for social engagement, self-esteem and cognitive function. Jamieson (2012) contends that educational activity in later life can operate within a transitions model to support the process of coping with life transitions, with older adults citing personal development as a significant motivator for learning.

The concept of education as an adaptive response to transition, interweaves with aspects of the continuity and activity theories of ageing, whereby, in respect of this study, the activity of learning to communicate online may combine with the maintenance of social connections, to support the sense of self through a process of change. The Schlossberg, Waters, and Goodman (1995) transition model was also used as an organising framework to consider the variables of situation, social support and sense of self, in relation to the participants' experience of learning to use the internet for social contact. The proposition that later life learning could combine with online social contact to support the participants through life transitions, including the relocation to extra care housing, was thus a consideration

Summary

Consideration of the theories outlined above, supported the exploration of the meaning of online social contact, for extra care tenants, by directing my thoughts to nuances of the participants' experience which may

otherwise have been ‘taken for granted’. The psychosocial theories of ageing, indicate a range of approaches to social engagement, in later life, from disengagement, to the maintenance of a high level of social activity. When these theoretical understandings are brought together with the data, they can indicate a complex, non-linear progression within the participants’ experience of online social contact which may otherwise have been overlooked. Theories drawn from gerontology, technological engagement, self-development and learning, all provided insights into the participants’ experience of online social contact. The commonality among these theories lay in their potential to indicate ways in which the participants navigate age-related change, bringing with them, their social support, from the earlier stages of their lives. The research paradigm, methodology and the theoretic underpinnings of this study, are reflected in the research methods chosen to the explore the participants’ experience of online social contact, and these are outlined in Chapter 5.

Chapter 5 - Research Methods

Introduction

The rationale for the adoption of the research paradigm, the methodology and the theoretical underpinnings of this inquiry were outlined in Chapter 4. In Chapter 5, the research methods are presented and discussed. Firstly, the research aim and objectives are re-presented to highlight the purpose of this inquiry. The sampling strategy, study design, data collection and data explication methods are then discussed. Data collection involved two primary methods, semi-structured interviews and participant diaries. Data was hand coded prior to thematic analysis and Wordles were created from the participants' diaries. Wordles were utilised, as a visual method of preliminary analysis, whereby an image was derived from a text, based on the frequency of word use within that text (pp.111-112). Wordles were then utilised as a tool to gain an initial impression of the data and later for data triangulation. The approach to ethical considerations and methods of achieving trustworthiness and rigour in the research conclude the chapter.

Research aim

The aim of this inquiry was to explore the meanings that a sample of extra care tenants attributed to using the internet for social contact. The research aim was approached through a series of interconnected research objectives. The aim and objectives are re-presented below.

Aim

To establish the meanings that extra care tenants attribute to using the internet for social contact.

Objectives

- To explore the extra care tenants' experience of using different forms of ICT based technology for social contact, with particular reference to the participants' perceptions of their own equipment.

- To explore extra care tenants' aspirations for and expectations of, online social contact.

- To investigate extra care tenants' experiences and concerns about using the internet for social contact.

- To understand the experience of using the internet for social contact in the context of life as an extra care tenant.

To address the research aim and objectives and in keeping with a phenomenological methodology, research methods were selected to privilege the participants' voices and provide entry into their social and digital worlds. The sample was recruited from my computer groups, in two extra care housing schemes, with data collection activities comprising semi-structured interviews and participant diaries. Activities took place over seven to nine months at each location. This longitudinal framework provided time for a trusting relationship to develop between researcher and participants and for the evolution of the participants' experience of online social contact to be captured.

Sampling strategy and research locations

A purposive approach to sampling was adopted. The aim was to capture diverse individual experience of the research phenomenon, from a sample of extra care tenants, with experience of online social contact, who differed in age, personal circumstances and life experience and might be willing to participate in the study, by attending interviews and keeping a diary. Members of my computer groups in two extra care housing schemes, in north east England, appeared to meet the criteria and group members were therefore invited to participate. The purposive sample was not intended to represent the UK extra care population.

Barratt et al., (2015) commenting on the recruitment of purposive samples advise that:

> *Purposive sampling relies on the researchers' situated knowledge of the field and rapport with members of targeted networks (p.5).*

I had prior experience of working with the potential participants and at the proposed research sites. These research sites differed in the nature, with

one situated in a small market town and the other located in an urban setting. Fischer (1982) reported differences between the social networks of city dwellers and the residents of small towns, with city dwellers having less familial support than residents of small towns. Amato (1993) also identified that informal social support was more readily available in rural communities than in urban areas, noting also that city-dwelling older people had less expectation of familial social support, when compared with older people in rural communities. Evans and Vallelly (2007), studying social well-being in extra care housing schemes, also selected research sites in diverse locations:

> *Four schemes were in suburban areas, one was on the edge of a village, and one was on the outskirts of a small town. (p17)*

Noting the reported differences between the social networks of older urban and rural populations, it was anticipated that recruitment from the two potential research sites, one largely rural and the other an urban setting, could extend the range of experience within the sample. On this basis, both locations were adopted as research sites, Location 1 (the rural setting) and Location 2 (the urban setting).

Sample size

Lester (1999) has suggested that a sample of one participant would be appropriate in certain phenomenological studies and has indicated that inferences can be generated from the responses of a small sample of participants. Mason (2010), in his study of sample size and saturation, in PhD studies using qualitative interviews, reported a sample size of one participant for a life history study, commenting that this *'might be expected due to the in-depth, detailed nature of the approach' (p.13).* A sample comprising ten older individuals was recruited for this study, with participant numbers being considered sufficient to maintain viability, should some attrition occur due to participant ill-health. A sample size of ten participants is within the range recommended by Cresswell (1998) who advises a sample size of between five and twenty-five participants for phenomenological inquiries. Mason (2010) reports that Morse (1994)

recommended a sample size of at least six participants for a phenomenological study. Laverty (2003) drawing on Sandelowski (1986) comments that the sample size would vary:

> *depending on the nature of the study and the data collected along the way. Researchers may continue, for example, to engage in interviews with participants until they believe they have reached a point of saturation, in which a clearer understanding of the experience will not be found through further discussion with participants (p.18).*

The longitudinal nature of this study provided opportunities for considerable data to be *'collected along the way'* and the purposive sample of ten participants provided diverse experience, within the shared framework of being extra care tenants and attendees at the researcher's computer groups. While arrival at data saturation can be difficult to pinpoint, following the collection and clarification of data from the series of three interviews and solicited diaries, little was being added. Enough data was available to address the research aim and objectives. Consequently, the sample size was considered to have been sufficiently large to reach data saturation.

Recruitment

A pragmatic approach to sampling led to the engagement of a purposive sample, with lived experience of the research issue, a willingness to talk about their experience and being sufficiently diverse to contribute rich and unique stories of individual experience. (Laverty, 2003) At the commencement of this inquiry, I was in contact with ten extra care tenants, five at each research site, who were learning to use the internet in computer groups which I was teaching. These individuals met the requirements of having 'lived experience' of the phenomenon under investigation and being a heterogeneous group, with a diversity of life experience. It was envisaged that members of the two computer groups might be interested in participating in the study.

Ferguson *et al.,* (2006) suggest the use of *consenting advocates,* when a researcher, who is a professional teacher, considers engaging their students in a study. The *consenting advocate* advises the potential participants of

the inquiry, while maintaining a distance from the researcher, as they consider their response. This approach was adopted. I asked the Facility Manager at each research site, to assume the role of *consenting advocate* to advise the computer group members of the inquiry and also to extend an invitation to other tenants at the research site, who might wish to participate in the inquiry.

The Facility Manager at each location made an initial approach to the computer group members and other potentially interested individuals. All the computer group members expressed interest in joining the study, with no other tenants expressing interest. The Facility Managers then provided the prospective participants with a leaflet (Appendix 1.i), explaining the aims of the inquiry and the participants' role within it. The participants were also advised of their rights, should they choose to become research participants. Thus the prospective participants also understood that they could continue to attend the computer group whether or not they participated in the inquiry. This gave them an opportunity to consider whether to participate. Some participants consulted with family members at this stage of the recruitment process.

At the next meeting of each computer group, I spoke to the prospective participants about the inquiry and their potential commitment, as participants. They were provided with a letter, (Appendix 1.ii) outlining the nature of the research and their potential involvement in interviews and diary keeping. They were invited to participate in the study and asked to sign a consent form (Appendix 1.iii) if, after time for reflection, and an opportunity to ask questions, they agreed to participate. They were thus able to give informed consent. (Where a tenant had poor vision, the information was read aloud and verbal consent was obtained.) All the members of the computer groups at Locations 1 and 2 agreed to participate in the inquiry.

Characteristics of the Sample

The sample comprised one male and nine female participants whose ages ranged from fifty-six years to ninety-eight years. The sample was not

representative of the ratio of male to female in the extra care population, where approximately one third is male and two thirds are female. (Housing Learning and Improvement Network, 2017) It was, however, indicative of the ratio of male to female in the computer groups at the research sites. The participants were all of white British ethnic origin and seven were from the local area. Most participants experienced some loss of mobility, dexterity or sensory losses which had occasioned their relocation to extra care housing. The age range within the sample indicated that the onset of health concerns, sensory losses or restricted mobility could occur at any stage of the later lifecourse.

Participants explained that an interest in developing their ICT skills was the motivator for joining a computer group. Nine participants owned a digital device and six had received some formal or informal ICT support. Two participants had prior experience of the internet. Nine participants had relatives living locally, while five participants also had friends or relatives overseas. Table 1 below gives brief details of the sample and indicates some factors which may impact on the participants' adoption of online social contact. (Full details of the sample can be found in Table 5a and 5b, Chapter 6, Findings, pp. 142-143).

Table 1 An overview of the sample

Location	Recruited	Male	Female	Age Range (years)	Digital Device Owner	Previous ICT Training	Prior internet use	Close family / friends abroad
1	July 2013	1	4	64-98 .	5	3	1	3
2	Jan. 2014	0	5	56-78	4	3	1	2

The participants' relationship with the researcher

Mishler (1991) comments that the data emerging from an interview is a joint production between interviewer and participant with trust and confidence between researcher and participants being fundamental to the data collection process. Lester (1999) referring to the importance of relationships in phenomenological inquiry comments:

> *The establishment of a good level of rapport and empathy is critical to gaining depth of information (p2)*

Similarly, Laverty (2003 p9) cites Polkinghorne (1983) who advised that phenomenological interviews should take place:

> *within an environment of safety and trust, that needs to be established at the outset and maintained throughout the project. The interaction in the interview takes place within the context of a relationship that is central to what is ultimately created (Polkinghorne, 1983).*

Thus, Lester (1999), Laverty (2003) and Polkinghorne (1983) contend that the nature of the relationship between researcher and participants will determine the quality of the data collected. Laverty (2003, p9) also quotes Marcel (1971) who went beyond the concept of the participants' trust in the researcher, to comment that the presence of a caring relationship is critical to this type of exploration:

> *When I say that a being is granted to me as a presence....this means that I am unable to treat him as if he were merely placed in front of me; between him and me there arises a relationship which surpasses my awareness of him; he is not only before me, he is also with me (pp. 24-26)*

Marcel's (1971) comment reflects a closeness and an embodied intensity in the connection between researchers and participants which enables deep feelings to surface.

Transition between roles of researcher and tutor

My original relationship with the participants was as their ICT tutor. I was aware that this prior contact with the participants had the potential to introduce my 'foreknowledge' and 'prejudices' into my interpretation of their interview and diary data. However, following Gadamer (1975) it is impossible to remove all fore-knowledge from a researcher's understandings and some prior knowledge can be helpful to the study. Therefore, I proceeded, recognising the potential benefits and hinderances of previous contact with the participants.

For the tutor to become the researcher, it was necessary to build the participants' confidence in the new role. A clear indication of the nature

and purpose of the research and an explanation of its contribution to knowledge of older individuals' use of online social contact, assisted in building the participants' trust. The longitudinal nature of the study and my dual role as researcher and tutor, meant the relationship with the participants was of a long duration. It was therefore essential to communicate a clear distinction between my friendly, professional relationship with the participants and a relationship whereby I became the participants' friend, a situation which would have undermined the integrity of the research. I was also aware of a duality in the nature of the research sites, which were a professional context for myself and the domestic sphere for the participants. Again, it was necessary to observe the boundary between research activities, teaching practice and the participants' home, entering the participants' flats solely for the purposes of this inquiry.

Researcher positioning and power relations.

My dual relationship, as researcher and the participants' tutor, had the potential to create the perception of a power imbalance in the relationship. This perception could have influenced the participants to provide data which they would otherwise have preferred not to share. Tomm (1993) has considered the nature of researchers' dual relationships and contends:

> *While dual relationships always introduce greater complexity, they are not inherently exploitative. Indeed, the additional human connectedness through a dual relationship is far more likely to be affirming, reassuring, and enriching, than exploitative (p.1).*

Tomm's comments resonated for me, as my dual roles brought an added dimension to interactions with the participants. Each participant's existing relationship with the researcher, as tutor, had its own strengths and challenges. The participants' trust and confidence in the research process was, to an extent, a reflection of their relationship with the tutor, their confidence in the tutor's role as researcher and their own tendency to trust or distrust in unfamiliar situations. Disclosure by participants differed between individual participants, between data collection methods and between stages of the data collection process. Participants were more expansive as they became familiar with the research process and all

participants provided me with some new insights. These insights, including a participant's experience of using the internet as a blind person, would have been difficult for to envisage, without the participant's help. Rossman and Rallis (2012) comment that qualitative inquiry can provide a multiplicity of learning experiences for researchers. To redress the perception of a power imbalance, I advised the participants of my own stance as a researcher and learner, reminding them that, in the research interview, the researcher is learning from the participants.

Retention of the sample

Ten participants were engaged and, of these, six completed all the data collection activities. The potential attrition of frail participants was a concern. Mody, *et al.* (2008) reporting on the retention of frail, older participants in clinical research, identify the difficulties caused by:

> *uneven follow-up intervals and missed appointments in non-attriters.. All these effects have implications for sample size and analytical power (p.4).*

Mody's experience resonated for this study, as appointments for interviews were occasionally forgotten by participants or rescheduled, due to their ill health. Mental health issues impacted one participant's mood and limited her ability to communicate. Another participant died during the data collection phase. She had been the first to engage with the internet at her location and had provided peer support for other participants. The loss had an emotional impact on other participants, although none withdrew from the inquiry at that stage. Three participants later withdrew due to age related frailty and ill-health. These occurrences highlighted the difficulty of participant retention in the extra care environment and the need for flexibility in the design and implementation of the study. However, although some issues of attrition arose, I was aware of the participants' circumstances and was able to reschedule missed appointments and retain the data that had been collected.

Study design

The study was designed to enable me to explore, with the participants, their lived experience of using the internet for social contact and gain an understanding of their social and digital worlds. It was planned as a longitudinal inquiry, of several months' duration, coinciding with the participants' training in the use of internet for social contact. The extended time frame enabled the participants to become familiar with the research process and for changes in their perceptions of online social contact, to be captured, as their internet skills developed. Data collection was undertaken sequentially, starting at Location 1 and concluding at that location before commencing at Location 2. The programme was sufficiently flexible to accommodate any delays, due to participant commitments or ill-health.

Two primary methods of data collection were selected; a sequence of three semi-structured interviews and solicited diaries. Both methods were familiar to the participants and drew on their existing skills. The participants had experience of attending interviews for other purposes, while most participants also had some experience of keeping a diary. Two participants had recently kept medical diaries and others had kept personal diaries. Jacelon & Imperio (2005) advise that interviews and solicited diaries can complement each other, as they differ in focus and detail. Diary data is generally recorded contemporaneously with an event, whereas interview data is more frequently drawn from retrospective recollections.

Kvale (1996) describes qualitative interviews as attempts to understand the participants' lived world and the meaning of their experience from the participants' perspective. The series of interviews was structured to engage the participants in voicing their lived experience. Qualitative interviews can enable participants to reconstruct subjective experiences, recalling their associated emotions and meanings. The participants' experience of online social contact was subjective knowledge, based on their own experience and interpretations and held in their consciousness. As they progressed through the sequence of three semi-structured interviews, the participants were invited to share their recollections of prior experience and their visualisations of future online social contact. This approach

seemed appropriate for a phenomenological study and enabled the participants to articulate their lived experience.

Participant diaries were selected to complement the series of interviews, as a method of data collection. They enabled the participants to record their technologically mediated social contact, as it occurred. I anticipated that the participants' diaries might include minutiae from the participants' everyday life, which could add to understanding and might otherwise have been forgotten.

Corti (1993) advises that the use of a participant diary followed by an unstructured interview is an approach which can elicit rich data. Drawing on Corti (1993) while maintaining a consistent interview style, I chose to use solicited diaries in combination with a semi-structured, rather than an unstructured interview. Semi-structured interviews were preferred as they allowed the participants freedom of expression, while maintaining a basic framework for the interview. This enabled me to set the focus of the interview and ensure the research aim could be addressed.

A sequence of three semi-structured interviews with a participant diary kept between the first and second interview were the methods chosen to maintain contact with the participants, as they developed their internet skills. The sequence of interviews drew on Dolbeare and Schuman's (Schuman, 1982) three-interview series. This approach is outlined by Seidman (2006), who contends that the three-interview series provides a model for phenomenological interviewing:

> *The first interview establishes the context of the participants' experience. The second allows participants to reconstruct the details of their experience within the context in which it occurs. And the third encourages the participants to reflect on the meaning their experience holds for them. (2006, p17)*

In this inquiry, the first interview established the context, in terms of the participants' life as an extra care tenant and their use of digital devices for social contact. The first interview was also used to introduce the participant diaries, which were kept for two weeks, between the first and second interviews. The second interview focused in greater depth on the

participants' day-to-day experience of online social contact, with the diary data explicated during the second interview. The third interview provided an opportunity for reflection and clarification of the meanings online social contact held for the participants.

Participant diaries were kept for two weeks, with the participants' use of digital devices recorded, over two cycles of weekdays and weekends. This allowed a pattern of usage to emerge. Due to the relatively short duration, the diaries were not onerous to keep and participants did not withdraw. The longitudinal nature of the study enabled any changes in the participants' perceptions and experience of online social contact to be noted. The design of the study incorporated adaptations to data collection methods to ensure the inclusion of two participants with sensory and motor difficulties, for whom speaking and writing were problematic (See adaptations to data collection methods pp.105-108).

Data collection

Qualitative methods of data collection enable researchers to access participants' feelings and perceptions and the meanings they attribute to the phenomenon under consideration. Phenomenological research requires an understanding of the 'lived experience' of the phenomenon from the perspective of the participant. This phenomenological study privileges the voices of the participants, enabling their perceptions and experiences of using the internet for social contact to be accessed through dialogue and written text. Participant reflections noted in my research diary are also included.

The data collection programme commenced at Location 1, with the first semi structured interviews. Informed consent had been given beforehand and process consent was adopted, whereby the participants confirmed their consent at the start of each interview (See Ethics, pp.119-123). The semi-structured interviews were conversational in style, encouraging the participants to feel comfortable in the interview situation. A topic guide (Appendices 2.i,ii,iii) provided a broad framework for each of the three interviews, identifying the main areas of interest, with flexibility to follow

up emerging data. The interviews followed the same format for each participant, although the second and third interviews were flexible enough for participants to clarify and elaborate on data they had provided in earlier interviews. Interviews were audiotaped, with permission, and later transcribed.

First interviews provided an introduction to the participants and situated them in their social and digital worlds. The first interviews were also an opportunity to explore the physical, social and digital context of the participants' use of online social contact. My topic guide drew on the Evans and Vallelly Interview Schedule 1, (2007, p81) where the tenants' experience of extra care as a social environment was researched. During the first interview in this inquiry, participants were asked to recall their decision to relocate to extra care housing:

> *Participant. I mean I wasn't ill then. Don't get me wrong. I was thriving and I was fit. I had the odd bout, where I was in hospital with pneumonia, things like that, but apart from that, quite fit. And it was right out of the blue, somebody said "Ee, I see they are building flats down on 'Scots Road' there".*
> *"Yes," she said, "Ideal for you!"*
> *And I said, "For me?"*
> *"Yes" she said "They are self-contained" she said.*
> *"I'll never get in there" I said, "They're for old people, you know"…*
> *You never think of yourself as old. Someone else at that age is old but, so I said erm, to my daughter...*
>
> *"Oh no, you're not going Mother."*
>
> *Participant "Look give yourself time. It's time you and your husband had a bit of privacy," I said, "And to be honest," I said, "I wouldn't mind having a bit of my own space."*

During the first interview the participants introduced themselves and started to populate their worlds. Data was provided on their earlier life, family and health status. Their impressions of extra care housing as a social environment were voiced along with their experience of their digital devices. When the interview took place in the participant's flat, the presence of their digital devices enhanced opportunities for data collection:

> *P Our lot say to me, I'm no good with technology, that's what….*

R But you are good, aren't you? You use the computer.

P I try. Put it like that. I'm not very good but I do use it and I do try with it. If I have a spare minute, I get it out. Mind, my son said "Don't get it out Mother. If it takes this long to boot up…"

R Where is it?

P It's there. .. I think it just needs an overhaul. He (son) was supposed to have done that (overhauled it) a few weeks back, so he said. But because he doesn't use it, of course, they don't know, and I don't know the difference. Because I'm very impatient, I turn round and switch it on and go and do something else.

In the extract from a first interview, above, the presence of the participant's laptop prompted her to share information about the device, her use of the device and family attitudes towards it.

Towards the end of the first interview, I introduced the participant diary. The diaries captured the participants' engagement with technology, "in the moment", providing a different perspective from the interview data. The participants kept a diary, recording their use of technology for social contact, for two weeks between the first and second interviews. I provided guidance on keeping the diary and this was adapted from Bartlett (2011) (Appendix 3.i). Smith (2004) described the use of semi structured interviews with a participant diary, in a study of identity development among new mothers (Smith 1999). He discussed the interplay between the data emerging from semi structured interviews and the diary data. He found that participants hinted at significant relationships but did not discuss them during their interviews, whereas they wrote freely about their significant relationships in their diaries. Similarly, in this inquiry, different data collection methods yielded different data. One participant commented during her first interview:

I'm not going to be very interesting.

While she lacked confidence speaking with me, in my role as the researcher, the extracts below illustrate how, in the 'privacy' of her diary, she brought me into her world.

29.8.13

Used computer to send a letter to my brother 'John'. I took about an hour to do this.

31.8.13

Worked on the letter. Set up an email account in Gmail. Replies – send emails to 'Graham'. Worked on the computer later in the day for half an hour.

9.9.13

Saw 'Jane' for a few minutes. Played dominoes with the best players, 'Janet', 'Ellen', 'Joan'. Due to Joan making a few arguments we only got through 6 games. Joan won the most. We all had a good laugh about it. Made supper later for 'Keith' (son). Went to bed early.

The diaries were collected from the participants after two weeks and explicated in the second interviews. Prior to the second interviews, I read and re-read each participant diary, noting queries which arose from the reading. These queries formed the basis of an individual topic guide for each participant's second interview (Appendix 2.ii). During their second interviews, the participants were given an opportunity to reflect on their first interview and then to outline their approach to completing the diary. Diary entries were then reviewed chronologically, with the participant and queries were addressed as they arose. This process enabled the participants to elaborate on any brief references or unclear diary entries and to provide some context to the written text. The participants' elaborations and clarifications, provided me with a clearer understanding of the participants' use of communications technology in the context of their daily life. I could then derive the meanings from the participants' diary data and understand the implications of their online social contact.

Third interviews provided time for further clarification, reflection and discussion about the participants' experience of social contact using the internet. The third interviews followed a similar format with each participant. Firstly, they enabled participants to raise any queries or concerns they might have, arising from the two earlier interviews. The participants were then invited to reflect on their experience of using the internet for social contact and to consider whether their feelings had

changed over time. They were also asked to envisage how their use of the internet might develop in the future. An individual topic guide enabled me to follow up queries arising from the data the participants had provided during the first and second interviews. Diary and interview data gradually revealed each participant's perceptions and understanding of their computer mediated social contact. The adoption of two complementary methods of data collection, the semi-structured interviews and participants' diaries, combined with the use of individual Wordles, created from participant diaries, facilitated triangulation of the data. (See pp. 111-112 for discussion of the use of Wordles). Wordles are presented with pen portraits of the participants in Chapter 6 Findings, pp. 131-140.

Data collection commenced at Location 1 in August 2013 with completion in June 2014, with the exception of one participant who joined the housing scheme and the study in Spring 2014. His data was complete in Summer 2014. At Location 2, data collection commenced in June 2014 and was completed in December 2014. Table 2 below indicates the programme of activities.

Table 2 - programme of data collection activities

	Location 1	Location 2
First Interviews	Aug - Sept 2013	June 2014
Participant Diaries - 2 weeks	Sept – Oct 2013	June – July 2014
Second Interviews	Nov 2013 - Early 2014	July – Sept 2014
Third Interviews	April 2014 – May 2014	Sept 14 – Dec 2014

Ten first interviews, eight participant diaries, seven second interviews and six third interviews were completed. The attrition of participants, who did not complete the series of interviews, stemmed from ill-health and death. (See Retention of the sample, p.96).

Venue for the interviews

Evans and Vallelly (2007) researching social well-being in extra care housing schemes, found that most participants chose their own flats as the venue for interviews, with a small number opting for communal areas of the housing scheme. In this inquiry, the time and venue of interviews were chosen by the participants. While quiet rooms were available for conducting interviews, seven of the ten participants chose their own flat as the venue. Doody and Noonan (2013) advise that participants may feel

more relaxed in their own home, but caution that domestic issues can cause interruptions and distractions. Interruptions occasionally occurred during interviews, when carers called in to check on a participant's medication or their general well-being. One participant was disturbed by a friend returning with grocery shopping during one of her interviews. She then invited her friend to stay for the remainder of the interview. Other interviews were briefly interrupted by telephone calls, other tenants and the mobile library.

Holloway & Wheeler (2010) comment that participants interviewed in their own home, can retain a sense of control of the interview situation. In this study, most participants who had chosen their flat as the interview venue, took control of the domestic agenda, by providing refreshments. Seipke (2008) found that for some older women, a transition to assisted living could mean a loss of 'long-standing feminine sphere' activities such as cooking, cleaning and entertaining and this impacted on their sense of self. In this inquiry, six participants (including the male participant) provided light refreshments, prior to, or during a short break, in the interview. Six participants using their own flat as the venue for interviews, also initiated some discussion about their technological devices, which were readily accessible in their context of use. The location of the participants' technological devices within the domestic space, provided additional data on their use and significance for the participant. Some devices occupied a central position in the living area, with others, more hidden, in a bedroom or behind furniture. The use of participants' flats as interview venues, gave participants an opportunity to gain some additional support with their devices.

One participant, at Location 1, chose a neutral venue for her first interview and her own flat for the second and third interviews. The neutral venue at Location 1 was a small activity room with French windows leading to a courtyard garden. This room was familiar to the participant as it was used by the computer group and for arts and crafts sessions. The participant, though helpful during the first interview, was a great deal more expansive during the two subsequent interviews in her own flat. There she showed

me family photographs, to elaborate on her social contacts and demonstrated her online activities using her laptop and iPad. The materiality of her family mementos and their positioning adjacent to her communications devices prompted me to consider the interconnection of the devices and her remote family. At Location 2, one participant arranged for her three interviews to take place in a wide corridor, adjacent to her flat. No explanation was given for this choice of venue. The location outside the participant's flat, may have been a means of maintaining some distance. However, the participant had previously referred to difficulties managing housework and this could also have influenced her choice of venue.

Five interviews were conducted in a neutral venue. Two first interviews with participants at Location 1 and three interviews with the participant, at Location 2, referenced above. Although the same interview schedule was followed, the style of an interview in a participant's flat was less formal than in a neutral venue. An interview in a participant's flat would generally take longer and more data was collected. This was due to time taken by the participants in the preparation of refreshments, participants being more expansive in their own space and the participants introducing their own communications devices into the discussion.

Adaptations in data collection methods to accommodate a participant's difficulty with verbal and written communications

One participant had difficulty in speaking, due to stress, depressive illness and the effects of long term medication. She could not have undertaken a series of audio recorded interviews as her speech would have been unclear and the recording process would have caused her considerable stress. She also had problems in writing, due to loss of dexterity and involuntary shaking. However, she indicated that she would like to participate in the inquiry, using the computer as a communication tool. With her agreement, written interview questions were devised, following the broad outline of the three semi-structured interviews with the other participants. This was made available to the participant on my laptop, as a Microsoft Word document. The participant was then able to access the document on the

computer, read the interview questions, reflect and type her answers using the computer keyboard. I was present to provide reassurance in the event of a problem with the computer. However, the participant was in control of the process and her stress in the interview situation was minimised. When the questions for the first interview had been answered, this provided a basis for further questions which were addressed during two subsequent written interviews. The completed Microsoft Word document provided a useful record which the participant could review, enlarge on, and which was subsequently explicated.

Due to the participant's anxiety, the questions for the first interview were divided into two parts and answered on two successive weeks. The participant's transition to extra care housing and the extra care context were the focus in Week 1 and social relationships were addressed in Week 2. Initially, the participant's written responses to interview questions mirrored the difficulties she experienced with her speech and contained incomplete sentences and missing words. This is illustrated in the extract from Week 1 of the first interview, below:

> *R. Could you tell me how you decided to move here?*
> *P. Owned own house in 'James Road' near here. Had been in hospital for long time. Did not want to leave house but because of my health knew could not manage. Speech difficulty anxiety and depression. Makes life very hard. Also, memory and concentration Very poor adds to the anxiety. (Summer 2014)*

The following extract, addressing the participant's use of communications technology is from Week 2 of the first interview.

> *R. How do you keep in touch with your family and friends?*
> *P. Use Telephone as means of keeping in touch. Speech difficult but some people understand me better than others. Friends who phone more often persevere. But I have great difficulty in dealing with official calls and in finding right person to speak to… (Summer 2014)*

As the participant became familiar with the interview method, her written responses to later interview questions became more fluent and detailed.

This more expansive style is illustrated in a question and answer from the second written interview, below.

> *R. How do you feel about receiving emails from your friends and family?*
>
> *P. I like getting the emails but I find them very hard to answer because I can't think of anything to say. 'Jenny' asked someone I had known from school to send me a card to get in touch. She sent it but I have not replied yet. She doesn't understand why I find it so difficult but...the anxiety and possibly the depression robs me of things to say. The doctor says it's the medication that causes it and they can't do anything about it. (Autumn 2014)*

Extracts from the cycle of written interviews illustrate the application of a hermeneutic approach to interviewing adopted for this inquiry and indicate the development of the participant's skills in using the internet for social contact (See pp.66-67).

The participant expressed some pleasure in having taken part in the inquiry, and while the written data from her interviews was initially not as rich or spontaneous as the spoken interview data from other participants, it provided insight into a life where communications difficulties impacted on many everyday experiences.

Adaptations to accommodate a blind participant

One participant who was blind, took part in the sequence of interviews but indicated that he would have difficulty in keeping a participant diary. After some discussion, several recording devices, designed for use by visually challenged individuals, were trialled as a means of keeping an audio diary. However, although the participant could use a recording device when I was present, he was unable to do so alone. To progress the situation and enable him to participate fully in the inquiry, it was agreed that his written diary would be privately dictated to a volunteer at the end of the computer class. His diary entries followed the same guidance as those for sighted participants (Appendix 3.i). They documented the participant's use of ICT based communications technology and elaborated on perceptions and feelings about the experience. Other information on daily life was

occasionally included. Frustrations and successes in the early stages of internet use as a blind person were reflected in this participant's dictated diary entries:

> *1/6/14*
>
> *I tried to use the iPad but kept getting a message about needed to be connected to internet when I thought I was. I now can turn on the iPad and unlock the screen.*
>
> *7/6/14*
>
> *We checked my iPad apple id and changed the password. I checked my emails with help and junk emails were deleted. I learned where to find any new emails but will need more practice. I got frustrated last week when messages were being read out that I did not understand eg You are not connected to the internet.*

Diary data collected with the help of a volunteer scribe may be subject to some input or editing from the volunteer. However, entries were internally consistent and reflected issues also expressed in the participant's interviews. This method of self-expression appeared to be enjoyed by both the participant and the volunteer, who both wished to continue keeping the diary after the two-week research phase was completed.

Data explication

Setting aside researcher expectations

Gadamer (1975) has stated that researchers begin with an idea or "fore-project", which represents initial expectations of the research outcome and this "projection" is constantly revised as the researcher penetrates the meaning of the data. Hycner (1985) suggests bracketing and phenomenological reduction, to overcome researchers' preconceptions, while also recognising the difficulties with this stance. He states:

> *This in no way means that the phenomenologist is standing in some absolute and totally presuppsitionless space. (p 281)*

In this study, while drawing on Hycner (1985), I utilised prior experience to support data interpretation and adopted:

> *an attitude of openness to the phenomenon in its inherent meaningfulness and...let the event emerge as a meaningful whole. (Keen, 1975 p. 38 in Hycner, 1985)*

Hycner's (1985) fifteen step approach provided a broad guide to explicating the data. I also drew on Kvale (2009) and on Burnard (1991) and Braun & Clarke (2006) for views on thematic analysis. Hycner's (1985) step by step approach to data analysis is presented below:

1. Transcription of the recorded audio tapes noting any non-verbal signals

2. Bracketing and phenomenological reduction *

3. Listening to the interview for a sense of the whole

4. Delineating units of general meaning

5. Delineating units of meaning relative to the research question

6. Using independent judges to verify units of relevant meaning

7. Eliminating redundancies

8. Clustering units of relevant meaning

9. Determining themes from clusters of meaning

10. Writing a summary for each individual interview

11. Returning to the participant with the summary and themes: Conducting a second interview, if appropriate.

12. Modifying themes and summary

13. Identifying general and unique themes for all the interviews

14. Contextualising themes

15. Producing a composite summary

* While providing guidance, Hycner (1985) also cites Keen (1975) in stating that guidelines should not be too prescriptive or reduce analysis to a set of procedures. He comments:

> *unlike other methodologies, phenomenology cannot be reduced to a 'cookbook' set of instructions. It is more an approach, an attitude, an investigative posture with a certain set of goals.*

(Keen, 1975, p. 41 in Hycner 1985 p279)

Consequently, Hycner's (1985) guidance is understood as :

> *an attempt to sensitize the researcher to a number of issues that need to be addressed in analysing interview data (p 280)*

Consequently, I did not attempt to 'bracket' prior knowledge.

Hycner (1985; 1999) has suggested that the term "data analysis" is not necessarily appropriate, for a phenomenological study, with data "explication" being preferred. "Explication" suggests gaining an understanding of the phenomenon's constituent parts, without losing sight of the "whole". From analysis or "explication" there may be an "essence" or commonality to an experience shared by a number of individuals. The interview transcripts and diary data were studied as unique statements and then compared to consider whether a commonality of experience could be identified. This was undertaken with an awareness that apparently similar experiences, may still be experienced differently by the participants, as Burnard (1991) asks:

> *To what degree is it reasonable and accurate to compare the utterances of one person with those of another? Are 'common themes' in interviews really 'common'? Can we assume that one person's world view can be linked with another person's? (p 462)*

Burnard (1991) advises researchers to 'stay open to the complications' of the process of interpreting the data and his advice was adopted, as I attended to the words of each participant, to reach an understanding of their unique utterances.

Preliminary Data Explication

In this longitudinal study, data collection activities were paced, allowing preliminary data explication to take place concurrently with data collection activities. DiCicco-Bloom & Crabtree (2006) advise that:

> *Qualitative data analysis ideally occurs concurrently with data collection so that investigators can generate an emerging understanding about research questions…. (p317)*

Following Kvale (2009) data explication started during the participant interviews, with meanings clarified with the participants as the interviews progressed. This enabled any misunderstandings to be resolved or missing data to be included without delay. In the following extract from a first interview, a participant clarified the reason for her enthusiastic uptake of Facebook:

> *R Would you like to go over that again, about the School Prom? It was really interesting.*
>
> *P Well, it was only a Prom, I think, on Monday night. They (son and granddaughters) came on Wednesday and er one of my granddaughters had these photographs on her phone. I don't know where she got them from but I couldn't see them because they were small on the phone…So she said "Get them upsized Nanna on Facebook. … Well, he (son) said, "Ah, We are going to be here all night." So, he wasn't very happy but we eventually got to the page……well the photographs were beautiful. You know what I mean. Well it's things like that and the fact that, like the next day, my daughter in Australia was looking at all them photographs.*

Initially, I had misunderstood the participant's point that Facebook contributed to connectedness within the family by providing a digital link between family members in the UK and Australia. The participant's clarification provided more data than her first account and illuminated other dynamics within the family, including the participant's observation that her granddaughter wished to share photographs with her, while her son complained that it would take too much time. Explication of the data from the first interviews informed the approach I adopted in subsequent interviews. Diary data was clarified with participants during the second interviews, with the third interviews providing an opportunity for reflection and further discussion.

The creation of Wordles from Participants' Diaries

Wordles, or word clouds, are created using an internet application in which text is analysed and a visual representation of the text is produced, giving greater prominence to the most frequently used words. Wordles were created from the participants' diary data and provided a visual

representation of the text, which was used as a tool for initial data analysis and to gain a preliminary understanding of the data.

Davalos *et al.,* (2015) created word clouds from participants' postings on Facebook, in a visualisation of the data, for a study of nostalgic content in Facebook posts. McNaught & Lam (2010) advise that word clouds offer:

> *a fast and visually rich way to enable researchers to have some basic understanding of the data at hand. Word clouds can be a useful tool for preliminary analysis and for validation of previous findings (p.1)*

Wordles provided a tool for visualising the data as a precursor to explication of the diary data. They provided insight into the participants' experience of the research context, their social networks and use of communications technology. Using Wordles, I gained a visual impression of significant elements of daily life for the participants - hobbies and interests, regular offline social contacts, and their use of technology for communications, entertainment and personal business. Wordles were also reviewed, as a means of triangulating the data, when the data explication was drawing to a close. Wordles were not used as primary tools for explication of the data because the words they comprise are seen out of context and are thus without the nuances of the original text. Individual participant's Wordles (Images 1-8) can be found with their pen portraits in Findings Chapter 6 pp.131-139 and in Appendix 4.i.

Listening to the participants' words

Following the completion of an interview, Holloway (1997) and Hycner (1985; 1999) recommend that the researcher listens repeatedly to the audio recording of the interview to become familiar with the words used by the participants and to develop a holistic sense of the context and what has been said. These recommendations were followed throughout the sequence of interviews. Occasionally, recorded speech was indistinct or muffled by background noise and the recording was played back repeatedly before transcription. On one occasion, an audio recording was not available. Notes had been taken throughout the interview and these were immediately written up.

Transcription

While Kvale (2009) contends that data analysis begins during the interview, Hycner (1985) advises that transcription is an obvious first step in data explication, stating that:

> *This includes the literal statements and as much as possible noting significant non-verbal and para-linguistic communications (p. 280).*

Spoken data, non-verbal and para-linguistic communications were noted during transcription. I undertook all the transcriptions, ensuring that the participants' verbal and non-verbal communications were captured as fully as possible. Silverman (2006) advises that transcription quality should not be neglected (p 209) and in this study, transcription was undertaken immediately after interviews were completed. This enabled me to retain the feel and context of the interview, while transcribing the verbal data. The participants' speech patterns occasionally made their words challenging to represent in text, as Marshall & Rossman (2011) in Rossman & Rallis (2017) note:

> *We do not speak in logical, organised paragraphs, nor do we signal punctuation as we speak (p. 208).*

Rossman & Rallis (2017) continue:

> *Therefore, important judgments are made in how the stream of words is rendered into text. (p. 169).*

The extract below exemplifies the challenge of punctuating verbal data, with the recorded interview being replayed several times before transcription. The extract also illustrates how non-verbal communications were noted during the interview (shown in italics below). Research notes aided the transcription and early transcription enabled the emphasis within the pattern of speech to be recalled. In the extract below, P represents the participant and R the researcher. My punctuation is also indicated.

> *P Well I mean, I was just typing away and all of a sudden it went funny. It went on to a different thing completely…*
>
> *R Did you find that a problem?*

P Not really because I still carried on and did a bit more, you know. Kept persevering, you know. As I say, it's just getting to know the basics, you know... yes, you see the problem is when you do a comma or something, and you have to go like this and press this, you know, (indicates using the Shift key) it means using this finger. (One that she has problems moving)

R Oh yes. That will be a nuisance for you, won't it?

P Yes. It's…you can't just, you know, put it lightly, you have to press...

R Yes, like inverted commas….

P But as I say, I can manage. As I say, I'm getting to know, you know, what I have to press and everything.

Gill (2000) contends that the focus on the data required for transcription provides early opportunities for a researcher to gain insights into meaning. She cites Potter (1996):

> *Often, some of the most revealing analytical insights come during transcription because a profound engagement with the material is needed to produce a good transcript (p.136).*

In the transcription, above, the participant's determination to remain positive, despite her difficulties in using the computer, emerged more clearly from the transcription process, than during the spoken exchange.

Thematic analysis

Braun and Clarke (2006) have described thematic analysis as:

> *a method for identifying, analysing and reporting patterns (themes) within data (p.79).*

They have cited Holloway & Todres (2003), Boyatzis (1998), and Ryan & Bernard (2000) in contending that thematic analysis is applicable across many major analytical traditions. Burnard (1991) recommends a similar approach, adapted from Glaser and Strauss (1967) and widely used in qualitative research. Burnard (1991) suggests that the process requires complete transcriptions of semi-structured interviews, a requirement which has been met in this inquiry:

> *The method described here assumes that semi-structured, open-ended interviews have been carried out and that those*

> *interviews have been recorded in full. It is also assumed that the whole of each recording has been transcribed (p.461).*

Rose (2011), cited Groenewald (2004) and Hycner (1999) to describe the process of thematic analysis adopted for her phenomenological study of students' experience of digital learning materials.

> *Thematic analysis consisted of a process of reading and rereading the interview transcripts until 'units of meaning' (Groenewald, 2004, p. 50) began to emerge, grouping those units into clusters and then identifying, for each cluster, a theme 'which expresses the essence of these clusters' (Hycner, 1999, p. 153) in Rose (2011).*

Thematic analysis, for this inquiry, draws on Rose (2011), Braun and Clarke (2006), Hycner (1985) and Burnard (1991). Fully transcribed interviews were coded by hand following an open coding process. Hycner (1985) describes the detailed attention required to carry out the initial coding process, which he identifies as delineating units of general meaning:

> *the very rigorous process of going over every word, phrase, sentence, paragraph and noted significant nonverbal communication in the transcript in order to elicit the participant's meanings (p. 282).*

In this inquiry, as units of meaning were delineated within a transcript, a colour was applied to them. Units with similar meanings were coloured identically. The following extract illustrates the initial coding of an interview transcript where a participant has spoken of her social environment, her interest in using technology for social contact and her confliction due to lack of skills and the physical limitations which impede her use of technology. Units of meaning are differentiated by their colours. The bracketed words are the initial codes assigned to the text.

P Our M called "What are you doing? Are you in town?" I said "No." It's only ten minutes. I go to town on the bus. Well a bit longer with this traffic in the centre of town. (Technology use as preliminary to family meeting)
That's why it's handy to send a text. (Sees benefits of using technology.) Well I can't. (Confliction. Lack of skills) I sometimes try to do a bit. (Effort) I'm getting thicker anyway. (Feels inadequate) Shouldn't say that. I'm trying to. (Confliction/Effort/Frustration) It's remembering things.

(Recognises difficulty) I'm not going to say, "Oh that's easy, you know." Not for me. I have to concentrate and do things over and over again before it clicks. You know what I mean? (Recognises difficulty and a way to overcome it) So I mean I'm doing what we're doing, I'm remembering some things at a time, know what I mean? Different buttons. (Achievement)
R You are remembering it, aren't you?
P I am, yes. (Achievement)

Hycner (1985) indicates that while the initial coding process delineates units of general meaning within a transcript, their relevance to the research question is not addressed until the next stage of the analysis. Within this inquiry, data were coded firstly at the level of individual interview and after the initial coding, explication proceeded to address the research question:

> *searching across a data set, be that a number of interviews… or a range of texts, to find repeated patterns of meaning (Braun & Clarke, 2006, p. 87).*

At this stage, interview transcripts and diary data were coded and compared. Following Hycner (1985) repeated patterns of meaning were considered in terms of their ability to address the research question. Data were clustered into units of 'relevant meaning', initially at the level of the individual interview or diary and subsequently across the data set of all interviews. This is illustrated in Table 3 (p.117).

The participants had expressed their feelings about learning to use the internet. Table 3 below draws together interview and diary data from five participants (P1 to P5) into a cluster of relevant meaning which could be broadly categorised as their response to the question of how they felt about learning to use the internet. The first line for each participant indicates their initial response. (Their response was 'wanting to learn'). Initial responses were re-examined and additional meanings were identified through closer examination of the text and discussion with participants. These additional meanings are listed below the first meaning, in the case of each participant. The additional meanings included a sense of achievement, the participant's approach to learning, family involvement and peer support.

Table 3 Clusters of relevant meaning

Cluster of relevant meaning Wanting to learn to use the internet'	Category
P1 *(Very quietly)* I'd like to, very much. I would. I think, you know, I might be more advanced later on. (First interview)	Wanting to Learn: Aspiration Monitors own learning Looks to the future
P2 So I mean I'm doing what we're doing, I'm remembering some things at a time, know what I mean? Different buttons. (First interview)	Wanting to Learn: Achievement Monitors own progress
P3 I learned where to find any new emails but will need more practice. (Diary)	Wanting to Learn: Achievement Monitors own progress Looks to the future
P4 I've got on to the tablet and I've got on to that really and I'm still just finding my way with it. But I'm definitely getting on with it. I've used it once a week with (P*) and I've now helped (P*) to use hers because her sisters, they've just inundated her with emails or gmails, whatever... (Third Interview)	Wanting to Learn: Achievement Monitors own progress Giving Peer Support Problem solving with P*
P5 Used the laptop downstairs this morning with my tutor. Sent some emails. (Diary)	Wanting to Learn: Achievement

Hycner (1985) advises that at this stage, the researcher can begin to look for the themes common to most or all of the data as well as the individual variations. An inductive process was adopted, initially staying close to the detail of the data, which is 'situation specific'. As the data were interrogated and the essence of an experience was identified, categories emerging from units of meaning were combined to form themes. Elo & Kyngas, (2008, p.3) cite Chinn & Kramer, (1999):

An approach based on inductive data moves from the specific to the general, so that particular instances are observed and then combined into a larger whole or general statement.

The emergence of themes from the clustered units of relevant meaning and categories shown above, is indicated in Table 4 below.

Table 4 Themes emerging from categorised clusters of data

Cluster derived from interview/diary data	Category	Theme
P1.I'd like to, very much. I would. I think, you know, I might be more advanced later on.	Wanting to Learn Aspiration Monitors own progress Looks to the future	Self-development
P2.So I mean I'm doing what we're doing, I'm remembering some things at a time, know what I mean? Different buttons.	Wanting to Learn Achievement Monitors own progress	Self-development
P3.I learned where to find any new emails but will need more practice.	Wanting to Learn Monitors own progress Achievement Looks to the future	Self-development Self-efficacy
P4.I've got on to the tablet and I've got on to that really and I'm still just finding my way with it. But I'm definitely getting on with it.	Wanting to Learn Monitors own progress Achievement	Self-development Self-efficacy
P5.Used the laptop downstairs this morning with my tutor. Sent some emails.	Wanting to Learn Monitors own progress Achievement	Self-development Self-efficacy

Following Hycner (1985), the process of identifying clusters of relevant meaning, categories and themes was repeated across all the interview and participant diary data, with the diary texts treated in the same way as the interview texts. Themes which emerged from the data are reported in the Findings Chapters (pp.128-206)

The contribution of Wordles from participants' diaries

Individual Wordles created from the participants' diaries were used to as a means of reaching a preliminary understanding of the diary data. This approach is .advised by McNaught & Lam, (2010) although Wordles are not considered appropriate for use as a stand-alone tool for data explication (pp. 111-112). The Wordles of the participants' diary data were, however, reviewed again in the later stages of data explication, to provide supplementary information and to triangulate data. Individual participant's Wordles (Figures 1-8) can be found with their pen portraits in Findings Chapter 6 pp.131-140 where further information, regarding the use of pen portraits, is also presented.

Ethics

Guillemin & Gillam (2004) note that discussion of qualitative research ethics stemmed originally from the ethical principles formulated for biomedical research, which was usually quantitative in nature, and that ethics in qualitative social research was developed more recently in the work of Kimmel, (1988); Orb, Eisenhauer, & Wynaden, (2001); Robley, (1995) and others.

As a framework for considering ethics in qualitative research, Guillemin and Gillam (2004) suggest that there are two dimensions of research ethics, 'procedural ethics' which relate to regulatory requirements and the process of obtaining ethical approval and 'ethics in practice' which is concerned with ethical issues arising from research in the field. Guillemin and Gillam (2004) add that professional codes of practice are also designed to address ethical issues arising in practice. However, they suggest that professional codes of practice may sometimes seem inappropriate to the circumstances arising in research practice, creating a further dilemma for researchers. I found the sensitising process of obtaining ethical approval drew attention to the legal framework of standards for ethical research. However, when an ethical issue developed in practice, it did not fit easily into the established framework.

When a participant shared a concern with me, I experienced a conflict between a professional code of practice, applicable to local authority tutors, which advised disclosure to local management, and the participant's clearly expressed wish for confidentiality. The issue was one of financial safeguarding and after discussion, the participant chose to disclose her concerns to an appropriate social worker and the issue was subsequently resolved.

The principle of participant confidentiality is well established and the requirement for informed consent and respect for the dignity and wellbeing of research participants has been central to research ethics since the introduction of the Nuremberg Code (1949). This inquiry was carried out with an awareness of the requirements of ethical research practice, in terms of my engagement with the participants and the safe handling and storage of data, as the study progressed. Ethical Approval was obtained for this study, through the Northumbria University, Research Ethics Approval System.

Ethical recruitment of participants

The practicalities of participant recruitment have been outlined in the Methods Chapter pp.87-88. However, there is an ethical consideration at the heart of the process, whereby potentially vulnerable older people are invited to participate in research which may be of no direct benefit to themselves. Guillemin and Gillam (2004) suggest that this dilemma can be overcome if:

> *the subjects of the research take up the goals of the research as their own; they are then not being used as mere means or tools by the researchers. In other words, in making the research their own project jointly with the researchers, they become participants in the research rather than subjects (p. 271).*

The possibility of the participants acting as co-researchers, was raised prior to the commencement of the study, with the participants expressing the view that the co-researcher's role would be too demanding. However, they found the research topic of interest and were agreeable to participating in an inquiry to develop knowledge that could potentially benefit others.

Their decision was grounded in an understanding of the research process and potential outcomes. The aim of the inquiry and the indirect nature of any benefits to the participants, were explained verbally and in the written invitation to participate. The process of obtaining informed consent is detailed in the Methods Chapter pp.87-88. The participants' altruistic engagement and motivation to contribute to the research, is indicated by their keeping of diaries for two weeks during the data collection phase. This was particularly demonstrated by the blind participant who offered to continue providing data, after the designated data collection period had ended.

Capacity to Consent

It was not anticipated that individuals recruited for this inquiry would lack the capacity to consent to participate. The participants were already known to me, as a purposive sample was recruited from my computer groups. These individuals were learning to use the internet and had already decided to participate in a computer group. They were therefore assumed to have capacity also to decide to participate in the inquiry. Under the principles of the Mental Capacity Act 2005 there is an assumption that a person over the age of sixteen years has capacity unless proven otherwise.

In my everyday practice, I provide information to enable the older people with whom I work, to make decisions in keeping with Section 3(1) of the Mental Capacity Act. This states that an individual is able to make a decision or give consent if they are able to: -

* Understand the information relevant to the decision

* Retain the information

* Use or weigh that information as part of the process of making the decision

* Communicate their decision

The challenge in my work setting is that there are individuals with undiagnosed (early stage) dementia. This is a well-known phenomenon and something which she needed to consider constantly during interactions

with the participants. Capacity is also relative to the decision that is to be made – an individual's ability to understand information, retain it and weigh it as part of a decision-making process, had been demonstrated as I discussed using the computer with them. It would have become evident during this interaction if they could not retain the information. Such skills were not a prerequisite for joining a computer group but they were helpful in meeting the challenges of using a computer. In any case, individuals were free to participate in a computer group, enjoy their own achievements and the company of other people. In the context of obtaining informed consent for participation in this research, the presumption of capacity was adopted. If, during my interactions and observations of the computer group members, there had been indications that individuals were unable to understand the information about the inquiry, retain that information and use it to inform decisions about participation, they would not have been approached to take part in the study.

The demands of the Mental Capacity Act were met by ensuring that the information provided about the inquiry was presented in such a way as to enable the individuals to engage with it, by presenting it:

* In a familiar location

* In sufficient detail to convey the message without introducing complexity

* Pacing the delivery of information in accordance with the participant's perceived ability to absorb it

* Using simple language

* Checking understanding by brief questioning, and observing responses

* Repeating if necessary

* Enabling potential participants to make one decision at a time

I judged that the level of detail provided on information sheets for the computer groups would also be appropriate for this inquiry. This information was also made available, verbally, for a blind participant.

Process Consent

The longitudinal nature of this study raised the possibility that the participants may experience a change in their cognitive abilities during the course of the inquiry. Consequently, I adopted process consent, as my approach to obtaining informed consent, as under this procedure consent is situational and context specific (Dewing, 2008). Process consent acknowledges the possibility of change in the participants' wishes and status and provides an opportunity to reconsider their decision to participate at the start of each data collection phase. Consent was re-established before each interview, throughout the study. This procedure was repeated with all participants, as the sample was a population where there could have been a level of undiagnosed dementia. A course of action was planned, to accommodate any participants who may have shown signs of undiagnosed dementia, as the study progressed. Should a participant have shown signs of undiagnosed dementia, I would have consulted with the participant regarding whether they wished to continue with the interview and involved a carer, where appropriate. If the participant wished to continue, I would have conducted the interview with an awareness that questions should be communicated simply and directly, the participant's response times may be longer and shorter interviews may be more appropriate.

Rigour

Researchers (Hycner, 1985; Sandelowski, 1993; Koch, 1994; Mays & Pope, 1995; Poland, 1995; Cypress, 2017; Rossman & Rallis, 2017) differ in their approach to establishing rigour in qualitative inquiry but there is broad agreement that coherence between the study design, sample and research methods is integral to producing research with sound internal logic and a trustworthy outcome.

In this inquiry, the design, methodology and methods encompassed key elements identified by Rossman and Rallis (2017), as contributing to rigour in qualitative research:

> *Triangulation, using multiple data sources and points in time. Being there, prolonged engagement with the participants and setting.*

Participant validation, discussing understandings and emerging findings with the participants.
Using a critical friend and the community of practice to test understandings and ideas (pp.55-56).

In line with Rossman and Rallis (2017), data triangulation was achieved through the use of multiple data sources, with data collected at different time points and from two research locations. The participants provided the primary data, with the main methods of data collection, semi-structured interviews and participant diaries, complementing each other in terms of the type of data provided (see pp. 97-99). My reflective diary was also used as a data source, to consider participants' interview and diary data, in conjunction with observations noted contemporaneously. Wordles, derived from participants' diaries, and used as a supplementary tool for data analysis, also provided an opportunity for data triangulation (see p.112).

Rossman and Rallis (2017) advise that a prolonged engagement with the participants and the setting, enhances rigour in the research process. I became sensitised to the research locations, having taught there for a period of twelve months before the study commenced. Being aware that familiarity might induce subconscious bias, data collection and explication were entirely separate from my teaching. The adoption of a longitudinal design for this inquiry facilitated ongoing contact with the participants and provided frequent opportunities for the consistency of data to be recognised and any inconsistency to be followed up.

Poland (1995) notes that the transcription of participant interviews provides an early opportunity for familiarisation and preliminary interpretation of the data, which he advises can add to the rigour of the later analysis. However, he indicates that there can be inconsistency in the quality of transcriptions, commenting that a poor quality of transcription will impact on rigour in research. Poland (1995) emphasises the need for careful attention to detail in transcribing participants' words. Similarly, Rossman and Rallis (2017) advise that *'how you respect and render your participants' words is central to an ethical study'* (p.169). They state that researchers benefit from undertaking transcriptions themselves and,

following Rossman and Rallis (2017), I undertook the transcription of all interviews for this study, shortly after they took place. The physical and social context of each interview and the participants' gestures, body language and tone of voice were recalled, during the transcription process, thus contributing to my immersion in the data and the quality and rigour of the inquiry.

Hycner (1985) and Rossman and Rallis (2017) advise researchers to return to the participants to verify meanings, as findings emerge. In this inquiry, the sequence of interviews and participant diary-keeping was an ongoing process which provided opportunities for clarification and the verification of meanings with the participants. However, Mays and Pope (1995) caution that in practice, participant validation of meanings has to be considered in conjunction with *'other evidence of the plausibility of the research account' (p.111)* as participants' perceptions of an issue may change. Koch (1994) found that some of her participants, who were patients in Care of the Elderly wards, did not survive to verify her interpretation of the meanings of their data. Similarly, Koch and Harrington (1998) advised that their participants' poor health, coupled with the passage of time between participant interviews and the explication of the text, made it difficult for their participants to re-engage with their earlier words. In this inquiry, some participants at Locations 1 and 2, were reluctant to re-engage with passages of their transcribed text. Short verbal summaries were preferred. Summarised interview data, presented verbally, following the hermeneutic cycle of clarification and reflection, facilitated participant feedback and thus supported rigour. Deeper and more complete meanings emerged from the data in successive interviews (see pp.75-76).

Hycner (1985), Mays and Pope (1995) and Rossman and Rallis (2017) concur that the use of independent researchers as critical friends, to compare their analysis of interview transcripts with those of the original researcher, enhances rigour in research. Hycner (1985) advocates the involvement of *'independent judges to verify units of relevant meaning' (p.286)* while Rossman and Rallis (2017) speak of an *'intellectual watchdog'* to assist the researcher to build an explanation for the

phenomenon of interest. In this inquiry, my supervisory team provided independent advice on the coding of transcripts and in establishing broader themes, again contributing to rigour in the analysis.

Koch (1994) equates 'rigour' with 'trustworthiness' which she advises is enhanced when a study provides a clear audit trail for other researchers to follow. Mays and Pope (1995) advise that a systematic methodological approach will protect the integrity of a qualitative inquiry and advise researchers to:

> *create an account of method and data which can stand independently so that another trained researcher could analyse the same data in the same way and come to essentially the same conclusions (p. 110).*

In this inquiry, details of the context, sample, data collection and data explication activities were carefully documented, to enable other researchers to follow the process and assess the transferability of the study. Extra care tenants' separation from their established social networks, following a transition to extra care housing, can mirror the experience of community-dwelling older adults, sheltered housing and care home residents, relocating in later life, to meet their changing needs. Thus, the study may well be transferable to other settings.

Summary

Research methods were informed by the methodology employed for this inquiry and took cognisance of the participants' need for a comfortable interview environment and a trusting relationship with the researcher. The research question was addressed through interviews and participant diaries with the longitudinal framework of the study giving the participants time for reflection between interviews. The timeframe of the inquiry allowed participants' perceptions to develop and change temporally and provided opportunities for reflection on the evolution of their online activities. The adoption of Process Consent enabled the participants to reconsider and make choices about their involvement throughout the study. Data was explicated with a thematic approach to the interview and diary texts. The

Wordles, employed to provide an initial understanding, also provided an opportunity for triangulation of the data.

Chapters 6, 7 and 8 - Findings

Introduction.

In chapter 5, the research methods adopted for this study were outlined and discussed. The Findings are next presented, in a series of three interlinking Findings chapters. The Findings chapters progress through the participants' physical, digital, social and emotional worlds, reflecting their experiences of online social contact and indicating any linkages between the participants' online and offline social relationships. In chapter 6 the participants are introduced through pen portraits and Wordles. They are situated in the physical context of the extra care housing schemes in which they live. In chapter 7, the participants' perceptions of 'getting connected' to the internet and their experiences as novice internet users are reported. In chapter 8 the impact of using the internet for social contact, on the participants' relationships, their self-development, autonomy, self-efficacy and the continuity of their personal biography is considered. The meanings the participants attribute to online social contact are explored and their implications are considered.

Chapter 6 – Life in extra care housing - technology use and social relationships

This chapter provides an introduction to the ten participants and the extra care housing schemes where they live (Locations 1 and 2). The participants are introduced using individual pen portraits and Wordles. The pen portraits are derived from in-depth interviews with the participants. They provide a rich description of the participants' daily life, their use of ICT, their social relationships and any disabilities or sensory problems impacting their use of the computer. The Wordles have been derived from the participants' diary data and provide a visual representation of each participant's experience of daily life, in the immediacy of the moment. The Wordles highlight the participants' use of technology for communications, entertainment and personal business.

To contextualise the participants' lived experience of daily life as extra care tenants, details of the two extra care housing schemes' size,

geographical position and shared facilities for tenants are then provided. Social relationships are central to this study and the participants' opportunities to socialise within their housing scheme are explored. The participants' digital devices and their opportunities to access the internet for social contact are then presented. The provision of communal computer equipment and internet connectivity differed between the two research sites. These differences in provision are lastly reported and discussed.

Pen Portraits of the Participants.

The pen portraits presented below provide an introduction to the participants. They include biographical data concerning their transition to extra care housing, their experience of technology and significant relationships which they identified during the research process. The pen portraits also include the participants' self-reported health issues, mobility and sensory problems and highlight aspects of the participants' lives which may encourage, support or impede their social internet use. As the participants are introduced, the nature of their lives and the challenges they face in using the internet for social contact, begin to emerge. All the participants and the individuals to whom they refer, in their interviews and diaries, have been given pseudonyms to protect their privacy. The data contained in the pen portraits was collected during in-depth interviews which took place during 2013-2014.

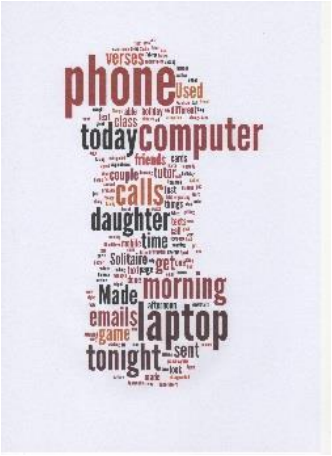
The use of pen portraits to introduce participants is established in the research literature. King & Horrocks (2010) suggest that providing 'pen portraits', giving biographical information about participants, can make them more '*alive and present*' *(p.139)* while Golsteijn & Wright (2013) reporting on research methods in human-computer interaction, suggest that portraiture can increase researchers' understanding of participants, *'their diverse motivations and behaviours and the context of [computer] use. (p.2).'* The rationale for the use of Wordles as a supplementary tool, to obtain an initial, visual impression of the diary data can be found in Chapter 5 Methods (pp.111-112). The pen portraits and Wordles introduce the participants, presenting their digital devices, social networks and the social activities which were significant in their daily lives. The

participants' wordles are shown as small representations below and enlarged to facilitate access to detail in Appendix 4.i .

An Introduction to the Participants

Location 1 - Extra Care Housing Scheme

Image 1 Kathleen's Wordle



Kathleen was eighty four years of age, having lived at Location 1 for four years at the commencement of the study. She relocated after a bad winter, when she developed pneumonia and melting snow flooded her house. Kathleen joined the computer group when it started and had prior experience of basic Word Processing. She had a cardmaking kit and used her computer to type verses for her cards. She had an old PC, from her daughter, later purchasing a new laptop with Windows 8 and Microsoft Office 2013. She also had a printer and her own internet connection. Kathleen quickly developed her computing skills after joining the computer group, using email, ecards and making occasional online purchases. She also used a landline and less frequently, her mobile phone. Kathleen's family lived locally and initially discouraged her use of the internet. Kathleen felt that she had surprised them by quickly acquiring internet skills without their support. She had arthritis in her hands, making mouse control difficult and her sight was affected by cataracts. Kathleen's Wordle (Image 1) indicates her communications devices. 'Phone', 'laptop' and 'calls' are prominent, with 'mobile' and 'texts' less often referenced. Kathleen's social network is indicated with 'daughter' being prominent and 'friends' less frequently referenced. 'Verses', 'game', and 'Solitaire' suggest hobbies and pastimes. Frequent references to a time frame, of 'today' and 'tonight' suggest immediacy or a diary full of activities.

Image 2 Freda's Wordle

Freda was eighty three years of age and had relocated to Location 1 after the death of her husband, four years previously. Her son-in-law had bought her a laptop and provided some basic tuition, before the computer group started. She already had an internet connection, email account, used Skype and did some basic Word Processing**.** She had a workstation in her flat, housing all her computer equipment. On her daughter's advice, she later purchased an Apple MacBook with Microsoft Office for Mac, a printer and iPad. In the computer group she learned to carry out internet searches, research her family history and occasionally shopped online. Freda also enjoyed games and puzzles downloading free games from the internet to share with family and friends. She had many family photographs which she often reorganised on her laptop. Her daughter and her children lived overseas and her son and his children lived locally. They used Skype to keep in touch. Freda also had a landline and mobile phone but said she used them infrequently. She used a wheelchair and liked to use the internet to check prices and 'look around where I can't walk around.' She had little feeling in her finger tips, which affected her use of the keyboard and mouse. Freda's Wordle (Image 2) suggests the significance of the iPad in her daily life and her use of the internet for puzzles, games and entertainment. References to friend, daughter and son indicate her social network. Email and Skype are referenced frequently, with instrumental online activity also indicated. Time is measured in hours and teatime is the most frequently referenced time of day.

Image 3 Teresa's Wordle

Teresa was eighty six years of age and had relocated to Location 1 four years previously, from sheltered accommodation. She joined the computer group shortly after it started. Initially, Teresa could undertake simple Word Processing tasks but had no internet experience. She owned a very old PC provided by her son, subsequently acquiring a more modern PC with Windows 7 and Open Office software. She did not have a printer. Teresa had no internet connection and when the housing scheme Wi-Fi became available, her son advised her not to make use of it. Consequently, she generally used my mobile Wi-Fi for internet searches and occasionally to send email. She also used the internet for information and sometimes for reminiscence. Teresa liked to use the computer to write letters, which were later printed and posted by her son. She had lived in Africa for many years and although her son lived locally, most of her friends and family were not local. She had a landline but not a mobile phone. Teresa's health was not robust and she was unable to read text on a computer screen unless it was significantly enlarged. Teresa's Wordle (Image 3) indicates her interests and methods of communication. While the computer is most frequently referenced, phone and letter feature more significantly than the internet, emails and gmail. Teresa's social network is indicated, with 'brother' and 'friend' most frequently referenced. Dominoes, Bingo, and Art are referenced , as are the fish in the housing scheme reception area, which she fed every morning.

Image 4 Alan's Wordle

Alan was sixty four years of age and had lived at Location 1 for six months when he joined the study. He relocated from another supported housing scheme and spent time in an adult mental health unit, after losing his sight, four years previously. Alan joined the computer group shortly after moving to Location 1. Prior to losing his sight, he used the internet for news and information. He hoped to resume his internet searches, but his visual impairment obliged him to learn to use the computer again from the beginning. Initially, Alan was given an iPad, on loan from the housing association. He experienced considerable difficulty and frustration with the iPad, frequently losing the sound and the internet connection. Through the Blind Veterans Association, Alan later acquired a Dell PC, running Windows 8 and Microsoft Office 2013 and an Epson printer/scanner. He used Dolphin Guide, assistive technology for blind and partially sighted people, configured for easy access from the desktop. Alan learned to touch type using a training keyboard on loan from the Blind Veterans Association. With help from a volunteer, he carried out basic internet searches during the computer group sessions. Initially he lacked confidence to use the internet unaided but he gradually learned to send and receive emails independently. He used the housing scheme's temporary Wi-Fi. Alan had a son living in north east England but most of his family lived in Australia and New Zealand. He used Skype to keep in touch with the local society for blind people and hoped eventually to use Skype with his family. He also used a mobile phone for social contact and to access services. Alan's Wordle (Image 4) reflects some of the complexity of his daily life. The internet, emails and iPad are most frequently referenced along with indications of his interest in learning -'tutorial', 'practiced' and 'learned'. Among his social network, 'son' is frequently referenced with 'brother', 'auntie' and 'tutor' also mentioned.

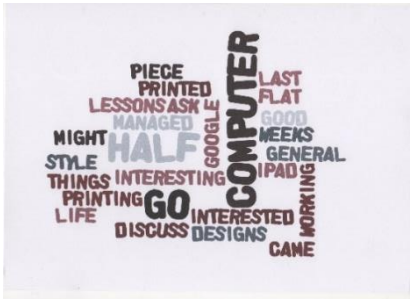
Helen was ninety eight years of age and had lived at Location 1 for five years. She moved into the scheme after spending time in hospital following an accident. She joined the computer group soon after it started and had her own laptop which was a birthday present from her daughter and son-in-law. The laptop rans Windows 7 and Microsoft Office 2010 Starter. She also had a printer. Helen's family encouraged her use of the computer and paid for some private lessons. Helen could use the computer for basic word processing. She carried out simple internet searches and also had an email account. However, she did not have her own internet connection and generally used the computer group's mobile Wi-Fi, with the help of tutors. Helen enjoyed receiving family news, photographs and videos by email and heard back quickly from her family when she went online. She had a good local support network, although her family had moved to the south of England. Helen said that she preferred the familiarity of the telephone (landline) for social contact. She did not have a mobile phone. During the study, Helen became quite frail and made less use of the computer. Helen's pen portrait was based on her in-depth interview data. She did not feel able to keep a diary and consequently there is no Wordle for her.

Location 2 Extra Care Scheme

Image 5 Denise's Wordle

Denise was fifty six years old and had relocated to Location 2 when it opened, in 2004. Complex health issues meant she was unable to manage in her own home. She was often in pain with tumours in her back. She had limited mobility and limited movement in her hands. Denise joined the computer group at Location 2 when it started in 2012. She had previous experience of computing with a Clait qualification gained some years ago. She later stopped computing when she was unable to use a mouse and commented that the opportunity to use a touchpad made computing possible for her again. Initially she owned a second-hand laptop which ran an early version of Windows and Microsoft Office. It was too old to access the internet and too heavy for her to lift. Denise purchased a tablet and established her own internet connection. With the tablet, she used the internet for information, family contact and entertainment. She also had regular telephone contact with her family and friends. Denise said she preferred communicating by telephone (landline). However, she found she could use a Smartphone for calls, texting and to download photographs. Denise volunteered for a local charity where she used her newly acquired internet skills in her voluntary work. Denise's Wordle (Image 5) primarily references telephone calls. 'Tablet' is mentioned but is comparatively insignificant. 'Father' and 'friend' indicate her social network and the prominence of 'enquiring', and 'welfare' suggest social support.

Image 6 Lisa's Wordle

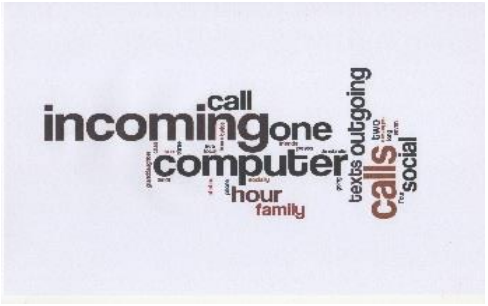


Lisa was sixty seven years of age and had lived at Location 2 since it opened in 2004. She moved into the housing scheme for security reasons. She had epilepsy and felt unsafe living alone in the community. Her epilepsy led to memory problems and difficulty remembering sequences. She also had diabetes and, with post-polio syndrome, had limited movement in her left hand. Lisa joined the computer group at Location 2 when it started in 2012. She had no experience of computing, and initially, no computer equipment. However, she bought a tablet and established her own internet connection. She also used a computer group laptop and iPad. Despite problems with sequences, she carried out internet searches, often looking for ladies' fashion. She also used email with the family but often required help with this. Lisa had four sisters living locally, who used the internet confidently to keep in touch with each other by email, Skype and Instant Messages. They also used mobile phones, frequently sending text messages. Lisa said that she would like to acquire internet skills to be included in their online discussions. She also hoped to use the internet for price checks and, eventually, online shopping. Lisa also had a landline and a mobile phone. She sometimes struggled with the mobile phone due to her memory problems. Lisa was socially active and volunteered for several local charities. Lisa's Wordle (Image 6) highlights the computer, iPad and Google as her predominant references to technology. The prominence of 'Go', 'interested' 'interesting' and 'lessons' indicates her enthusiasm for her use of technology.

Image 7 Pauline's Wordle

Pauline was seventy eight years of age and had lived at Location 2 for two years. She was a widow, with care needs and initially relocated to a care home when her husband died. Finding it restrictive, she subsequently moved to Location 2, as the Extra Care environment allowed her greater independence. She had an academic background, with her own computer and internet connection, used occasionally for research. Pauline was deaf. She also had Multiple Sclerosis, used a wheelchair and with limited movement in her hands she had difficulty using a keyboard. Pauline joined the computer group at Location 2 when it started. She used the internet for basic internet searches, following up interests and occasionally making online purchases. Pauline made her online purchases with the help of her private carer, who also fulfilled the role of companion. Pauline had a landline and a mobile phone and had a preference for using the landline. Sometimes her carer made telephone calls on Pauline's behalf. Her mobile phone was kept charged but Pauline rarely took it with her when she went out. She had a brother who lived in the region and they met occasionally. She went to the theatre and attended short courses on history and literature, using the internet to find out about local events. She had an email account but used it infrequently. She said there was no one left in her family to contact by email. Pauline's Wordle (Image 7) shows the prominence of the telephone (landline), in her diary data. The data also indicates that calls were generally instrumental rather than social. There is little indication of Pauline's social network**.**

Image 8 – Olga's Wordle



Olga was in her mid-seventies and had lived at Location 2 since it opened in 2004. She had previously lived with her married daughter and relocated to give her daughter privacy in her marriage. She had complex health issues and used a wheelchair. Breathing difficulties meant that Olga always had a link to an oxygen cylinder and she had been diagnosed with cancer. She joined the computer group at Location 2 when it started, but ill health made it difficult for her to attend regularly. She had some experience of computing and had attended a word processing course at a local FE College. Olga owned a laptop and tablet and had her own internet connection. Her laptop ran Windows XP and Microsoft Office 2003. She also had a mobile phone and landline. Olga carried out basic internet searches and shopped online with help. She used email and Facebook but was not a confident user. She had experienced an upsetting loss of privacy, due to a family error, with Facebook, but enjoyed using it to share family photographs. Olga had six adult children and many grandchildren. Most of her family lived locally and visited frequently. However, one daughter and her family lived in Australia. Olga's family used the telephone, mobile phone and internet to keep in touch with each other and with her. Olga described Skype calls to her daughter in Australia, as enjoyable family occasions with everyone jockeying for position and wanting to be heard. Olga's Wordle (Image 8) suggests many incoming calls and frequent use of the computer. Contacts are social with 'family' prominent.

Wendy had lived in the Extra Care housing scheme at Location 2 for two years. She had previously spent several months in an adult mental health unit and was unable to return to her own home. She was sixty nine years of age and had bipolar disorder which led to depression and great anxiety. She had an articulatory speech disorder and a fine-motor disorder which made writing difficult and limited her dexterity with the computer keyboard. She also experienced involuntary movement (shaking) which was particularly apparent when she was anxious. Her social circle was small and she attributed this to her long term depression and other health problems. Wendy owned no computer equipment and used a borrowed laptop (running Windows 8 and Microsoft Office 2013) and internet connection. Consequently, Wendy's access to the internet and her email account was limited to the two hours per week when she received tuition. Her friends were aware this and would send her an email in time for her computer session. Wendy then responded and either took up the contact again the following week or used the telephone to supplement her use of email. She said that her problems with speech made face to face and telephone communication difficult and she enjoyed using the internet to support her communications with her friends. Wendy also carried out basic internet searches to follow up her personal interests (poetry, fiction, history and current affairs.) Her internet searches were sometimes a means of reminiscence, following up people and ideas from her student days. Wendy had a small family circle with a sister and brother-in-law living in a nearby town. She said her shaking hands made writing difficult and prevented her from keeping a diary. Consequently, there is no Wordle for Wendy.

A summary of the participants' characteristics and experience.

The pen portraits and Wordles have been used to introduce the participants and to foreground the aspects of their personal biography that prompted their move to extra care housing. The pen portraits also outlined the participants' computer skills, internet use and the digital devices available to them. Participants' skills in using the internet varied significantly, with some participants quickly becoming independent users, while others needed considerable support to communicate online. Health status was also a factor in the participants' use of the internet, with sensory and dexterity losses impeding their adoption of online social contact. The participants' social networks also varied greatly in size, composition and the proximity or distance of their family and friends. Participants' opportunities for social contact were also impacted by their own health and mobility issues, making online social contact a significant vehicle for maintaining relationships, where face to face contact was not possible. These aspects of the participants' profiles are summarised in Table 5a and Table 5b below. Participants living at Location 1 are shown on Table 5a with those at Location 2 on Table 5b.

Table 5a A Profile of the Research Participants - Location 1

Participant	Computer Skills & Use	Access to equipment	Independent Internet User? / For how long?	Social contact outside the Housing Scheme.	Self-Reported Physical, Sensory/Dexterity Issues
Kathleen Female Age 84 yrs.	Word Processing, Card Making, Basic Spreadsheets, Email, internet search, Skype, ecards, occasional online purchases. Basic Word Processing & Card Making skills before joining the Computer Group. Additional skills learned in Computer Group.	Second-hand computer & printer, new laptop & own internet connection. Owns a mobile phone. Has difficulty texting.	Yes Using the internet independently for approximately 12 months	Close family living locally. (Two married daughters & grandchildren). Extended family at a distance. Also has friends living locally.	Arthritis in hands affects mouse control. Limited dexterity affects texting. Cataracts affect vision, making computer screen difficult to see.
Freda Female Age 83 yrs.	Word Processing, Internet search, email, Skype, Family History, Shopping. Games & puzzles on computer & iPad. Previously used internet & Word Processing. All skills further developed in the Computer Group.	Own laptop, iPad & internet connection Owns a mobile phone. Rarely uses it – prefers Skype.	Yes Using the internet independently for 3 years.	Daughter and grandchildren in Amsterdam. Son & his children live locally.	Poor sensitivity in fingertips makes typing difficult. Problems with writing and spelling. Wheelchair user with arthritis & heart and lung problems.
Teresa Female Age 86 yrs.	Word Processing, basic internet search and email. Very limited Word Processing experience before joining Computer Group.	Own computer. Internet access using computer group equipment. No mobile phone.	No Using internet for 12 months always with help from tutors.	Friends & family mainly at a distance. Some family members in Africa. Son lives locally.	Frailty and poor mobility . Impaired vision means text has to be greatly enlarged on a computer screen.
Helen Female Age 98 yrs.	Basic Word Processing, internet search and e-mail. No computer experience before joining Computer Group.	Own laptop. Internet access through the computer group equipment No mobile phone.	No Used the internet for 6 months, always with help from tutors or family.	Good local support network and good contact with family, although they do not live locally.	Computer use seen as a challenge as heart problems, frailty and poor mobility mean Helen has limited energy for other things.
Alan Male Age 64 yrs.	Internet search and email, using Dolphin Guide assistive software . Learning to touch type. Some experience of internet prior to sight loss (4 years ago).	Own PC scanner/printer and many internet enabled devices. Internet access & iPad via housing provider. Training keyboard from Blind Veterans Assoc.	Has used the internet for 6 months. Uses email & Skype independently. Needs help with internet search.	Son lives in the region. Family mainly in Australia and New Zealand. Limited local support.	Alan became blind with Glaucoma, approximately 4 years ago. He suffered severe depression & was hospitalised for several months.

Table 5b A Profile of the Research Participants - Location 2

Participant	Computer Skills & Use	Access to equipment	Independent Internet User? For how long?	Social contact outside the Housing Scheme.	Self-Reported Physical, Sensory & Dexterity Issues
Denise Female Age 56 yrs.	Word Processing, internet search and e-mail, occasionally games & TV. Most skills learned in the Computer Group.	Own tablet, second-hand laptop, own internet connection. Prefers telephone when very unwell. Finds mobile phone more difficult to use.	Yes Internet used independently for 12 months.	Family not local but has local friends and regular family contact.	Tumours in back cause distracting pain and led to wheelchair use. Arthritis in hands make it difficult to use a mobile phone and control a mouse.
Lisa Female Age 67 yrs. .	Basic Word Processing, Internet Search, occasionally games & Wordsearch. Interested in online shopping and email. No computer experience before joining Computer Group.	Own tablet & internet connection. Uses computer group laptop. Owns a mobile phone but has difficulty remembering procedures for basic use.	Limited independent use. Has help from tutors, family and another tenant. 6 months experience.	Large local family. (Four sisters who meet regularly with her.) Social contact through two charities where she volunteers.	Polio left Lisa with limited use in one hand and some mobility problems. Now experiencing post – polio syndrome with fatigue and muscle weakness. Epilepsy affects memory and recall of sequences on the computer and mobile phone.
Pauline Female Age 77 yrs.	Basic Word Processing. Basic internet search. Some online purchases and email with help from tutors or private carer. Little previous computer experience.	Own computer & internet connection Owns a mobile phone – unable to use it.	No Internet used for 12 months with help from tutors and private carer.	Widowed approx. 3 years ago. One brother who lives locally. Friendly relationship with private carer. Some friends in the local area.	Has MS which limits her mobility. Wheelchair user. Limited movement and reduced dexterity in her hands makes typing difficult.
Olga Female Age 76 yrs.	Word Processing, Internet Search, Shopping, email, Facebook, Skype. Some computer skills prior to joining Computer Group.	Own laptop, tablet & internet connection Difficulties with small size of her mobile phone.	Independent user but needs help with some applications. 2 years' experience.	Large local family. One daughter and her family in Australia. Local friends.	Difficulty attending the computer group due to breathing difficulties & living with cancer. Brings oxygen cylinder to computer group when she attends.
Wendy Female Age 69 yrs.	Word Processing, basic internet search and email. Some Word Processing skills prior to joining Computer Group.	Owns no computer equipment Owns a mobile phone – unable to use it.	No Uses the internet with help from tutor.6 months experience.	Small social circle with few local friends. Uneasy relationship with sister (only local family).	Depression and speech problems make face to face and telephone contact difficult. Stress makes it difficult for Wendy to envisage owning her own computer.

Where the participants live

To establish the context for this study, an overview of the research sites, Locations 1 and 2, is next presented, setting out the size, and geographical location of the extra care housing schemes and the services available for tenants. The participants' opportunities for social interaction are explored and the availability of infrastructure for their internet access is considered. To facilitate their online communications, participants adapted their private flats to accommodate their digital devices and claimed communal space to accommodate their internet training. The similarities between the research sites and the differences which distinguish them as physical and social environments are noted. Both research sites provide opportunities for tenants to come together to enjoy lunch, social activities and entertainment. However, the nature of the social programmes and the support available for the tenants' use of the internet differed between the two locations.

Both extra care housing schemes were opened in 2004. They are situated in north east England and are owned and managed by the same national provider of older people's housing. The housing provider has been established for over fifty years and has a portfolio of approximately nineteen thousand properties for rental, sale or shared ownership, in locations across England. The housing association's portfolio includes approximately two thousand five hundred units of extra care housing.

Location 1 is an extra care housing scheme with thirty six, one and two bedroom, self-contained flats. At the commencement of the research, there was an occupancy rate of almost one hundred percent and often a waiting list for vacant properties. The population of Location 1 was aged between sixty four and one hundred and one years of age, with a ratio of two female to one male tenant. The average age at entry to Location 1 was between eighty and eighty four years but individuals could move to this accommodation from the age of fifty five years. (The median age of the research participants was eighty four years.) Care and support was available from an onsite team of professional carers on a round-the-clock

basis. This included a daytime care team providing personal care, help with medication, meals and daily living. Two on-site waking carers were on duty throughout the night. An alarm call monitoring service was also provided for tenants, twenty four hours per day. Some tenants had commented that health concerns and fears for their personal safety had prompted their move to extra care housing. Consequently, they said availability of twenty four hour care and support gave them 'peace of mind'. Tenants' care needs were assessed on entry to the housing scheme, with individual pre-planned care packages being provided. Care could range from a five minute daily 'pop-in' to confirm the tenant's health status, to thirty hours of care per week. The housing scheme was within easy reach of an active local community with some older residents from the local community attending for Bingo, Whist and special events.

Location 1 is situated half a mile from the centre of a small market town. The housing scheme serves a largely rural community, comprising the market town and outlying villages. The market town has a population of approximately seven thousand people. Twenty percent of the town's population is aged sixty five years or older, with a similar percentage of older people in the surrounding villages. This is a higher percentage of older people than the national average for England and Wales where 17.7% of the population is aged over sixty five years. (ONS 2015) While there are some small areas of deprivation in the town and outlying villages, the population is relatively affluent. On the Index of Multiple Deprivation (2015), which is a UK government qualitative study of deprived areas in English local councils and which highlights seven indicators of deprivation – income, employment, health deprivation and disability, education, skills and training, barriers to housing and services, crime and the living environment, the town was ranked within the seventh decile, where the first decile was the most deprived. It was ranked, in terms of the above indicators of deprivation, as better than 68% of areas in England. However, the area health ranking was better than 40% of areas of England, despite the proximity of three care homes and sheltered housing for older individuals.

Location 2 is also an Extra Care housing scheme and it comprises forty two, one and two bedroom, self-contained flats. At the commencement of the study, there was an occupancy rate of around ninety percent and the Facility Manager advised that flats were generally easy to let. The population of Location 2 was aged between fifty one and one hundred and two years of age, with a ratio of two female to one male tenant. The average age at entry to Location 2 was approximately seventy five years but new tenants could be accepted from fifty years of age. While fifty was usually the minimum age for entry, three tenants who were unable to manage at home, due to stroke and loss of mobility, had been accepted in their forties. (The median age of the research participants was sixty nine years.)

On-site professional care was available on a round-the-clock basis. This included a daytime care team providing personal care, help with medication, meals and daily living. Two on-site waking carers were on duty throughout the night. A round-the-clock alarm call monitoring service was also provided. Tenants' care needs were assessed on entry to the housing scheme, with individual pre-planned care packages being provided. Care could range from a short morning 'pop-in' to confirm the tenant's health status, to thirty hours of care per week for some individuals. Several tenants had preferred to engage their own carer and had negotiated a private care package to meet their own requirements. The housing scheme management acknowledged that there was little interaction between the housing scheme and the local community. They described the housing scheme as relying on itself for neighbourly and communal interaction and activities.

Location 2 is situated on the outskirts of a large market town which has a population of over one hundred thousand people and many industrial and commercial premises. The housing scheme is located at a distance of two miles from the town centre and is situated on a main road leading through a residential area to a new industrial estate. It serves an area of mainly older, privately owned and rented, semi-detached and terraced housing. Location 2 has a high communal population in its immediate surroundings, with three care homes, an extra care housing scheme and a women's refuge

located nearby. Sixteen and a half percent of the population of the neighbourhood is aged over 65 years. (ONS 2013). On the Index of Multiple Deprivation (2015), the area in which Location 2 is situated is within the most deprived decile of deprived areas in England from a ranking of over 32,000 areas, with the health element ranking as better than 3% of areas in England. (The Index of Multiple Deprivation (2015) is used by the ONS to highlight small pockets of deprivation which could otherwise remain hidden. Each distinct area on the Index is smaller than a council ward, having a minimum population of 1000 individuals or 400 households.)

While Location 1 draws its population from a relatively affluent area, with some localised pockets of deprivation, the population of Location 2 is drawn largely from the local area, which is categorised as deprived. However, at the outset of the study, a low level of internet use was found in the population of both research sites. Internet use was estimated by both Facility Managers as approximately one in six of the tenants. Given the demographic profile of the population of the research sites, this suggests that older age and female gender are stronger predictors of non-use of the internet, than economic circumstances.

While Locations 1 and 2 are situated outside the centre of their local town, both are on a bus route to the town centre and are served by some small local shops. Both locations provide an on-site restaurant, hairdressing salon and corner shop, with personal care, domestic support and a twenty four hours per day emergency care service. At both locations, the facilities are managed by a non-resident Facility Manager employed by the housing provider. The care service is staffed by local authority carers at Location 1 and a private care company at Location 2. Carers undertake personal care and some social support. An external catering company runs the restaurant at both locations, providing a cooked lunch, daily, for all tenants. The cost of lunch is included within the tenancy agreement. Breakfast and afternoon tea are available on request, for an extra cost. The catering company has a contract for services at both research sites and at a number of similar establishments in the north of England. At both research sites, hair dressing is provided by an external visiting hairdresser and the corner shop is

manned by tenants with some local volunteers. At Locations 1 and 2, newspapers are provided, daily, by an external supplier. At Location 1, milk is also provided daily and a local greengrocer brings in a selection of fresh fruit and vegetables once a week. A social programme of activities is available at each location.

Private space: participants' self-contained flats at Locations 1 and 2

The accommodation for tenants at Locations 1 and 2 largely comprises one bedroom self-contained flats. Of the thirty six flats at Location 1, thirty five are one bedroom flats with one flat having two bedrooms. At Location 2, forty of the forty two self-contained flats have one bedroom, while two flats have two bedrooms. The flats are all readily accessible with level entry to the hall, open plan lounge, adjacent fitted kitchen, bedroom(s) and bathroom.

With limited living space, participants indicated that they had tried to retain their most significant possessions and explained how these were managed, within their private space. Most participants commented on the physical presence of their digital devices and signalled the adaptations, which enabled them to bring the materialities of online social contact, into their living rooms. Wendy, a retired librarian, with an articulatory speech disorder, described her books as her children and said she was sorry to lose most of them when she moved to Location 2. Her flat was personalised with some books and ornaments and contained a landline and a mobile phone. She commented:

> *Use telephone only. Have mobile phone but can't use it.*

When asked about using a computer in her flat, she remarked:

> *Lack of confidence is part of the anxiety which is with me all the time… If I was on my own on computer and made a mistake, I feel I would just sit and shake and not be able to correct it.*

Consequently, Wendy never purchased a computer.

Helen rented the two bedroom flat at Location 1 and was able to retain more of her possessions than most other tenants. She used the second bedroom as a dining room, adapted for computer use, with her laptop set up on the dining table and her printer on an adjacent sideboard. She explained that she protected the dining table with mats placed beneath the laptop. Her dining table was a significant possession, which she said, evoked memories of her married life and she would not like the laptop to scratch it. The laptop, which she described as a birthday gift from her daughter and son-in-law, was less significant for her.

At the commencement of the study, Alan, who was blind, had few possessions in his flat at Location 1. He commented that most of his furniture had belonged to the previous occupant of the flat. During the period of this inquiry, his interest in computers developed significantly and his private living space was transformed by his newly acquired digital devices. In due course, two workstations were purchased and positioned side by side in his living room. He explained that he had purchased his first workstation to accommodate his new computer, keyboard and printer. He subsequently acquired more devices, including wearable technology, to support his interests, daily activities and navigation of his domestic space. He commented that he purchased a second workstation to enable him to place his devices where he could find them again. After acquiring the second workstation, he remarked:

> *I've gained a new desk and cupboard to allow me to access all my gadgets. Headphones, cd reader, internet radio, extender and milestone recorder. Most of them need recharging…so we've put labels round the cables and used 'penfriend' [wearable technology]to put a talking label on each one, so I know which one to use for which gadget.*

These workstations, digital devices and associated equipment occupied approximately one quarter of Alan's living room and managing this space required time and planning. The complex interaction between Alan, his voluntary helper, his furniture and his digital artefacts, came together in an ongoing organisational process which was an expression of Alan's interests and skills. He commented on his purchase of a Wi-Fi extender to

enhance his internet connection and his engagement of a computer technician to:

> *fit an extender for my broadband…Now the broadband is excellent. We now have Skype and I have spoken to Ellen (computer technician) in her own home. I hope to add other (Skype) contacts soon.*

The opportunity for online social contact motivated Alan to act independently, taking responsibility for the quality of his internet connection. Although the internet connection was provided by the housing scheme, he adapted his private space to accommodate a Wi-Fi extender and paid for professional help to improve his experiencing of the shared internet connection. He perceived his 'excellent' broadband as a successful outcome and established a rapport with the computer technician.

At Location 1, Freda had a substantial workstation for her computer equipment, prominently situated in her living room. She described her use of her digital devices, commenting that her family would give her a Skype call, whenever they needed her. Consequently, her laptop was switched on from early morning until late at night. Referencing her workstation, she remarked on her plans to reorganise her computer equipment, repositioning the printer, which was at a higher level than her laptop. It was 'too high up' for her. She would also replace the office-style swivel chair, which had been supplied with her workstation. She explained:

> *I like to use my iPad in the evening. I can sit in my armchair with it and be comfortable. The office chair isn't so comfortable for me. When I go to stay with 'Paul' (her son) in October, we'll get another (office) chair and take this one away.*

For Freda, who had limited mobility and used a wheelchair, comfort stemmed from the interaction between her embodied self, her armchair and her iPad. Her relationship with her digital devices and the possessions which supported them, was changing temporally. She replaced and reorganised them and used them differently according to the time of day. Looking ahead, Freda sought to enhance her experience of using her workstation, with the purchase of a more comfortable chair. Whereas Alan drew on his relationship with a voluntary helper and a computer technician to bring about positive change, in the management of his devices, Freda drew on the support of a close relative, to help her to reorganise her digital equipment and replace the hard office chair, with a more comfortable seat.

At Location 2, Olga also kept her internet enabled laptop switched on and ready for use. She described it as *'an old thingy'* which took a long time to *'get going'*:

> *It's on there. (Laptop on a small chair in the sitting room.) So I only have to lift it over. It's already plugged in…. With these things, you've got to use them or lose them. That's why I keep getting it out, I don't want to lose touch with it.*

Olga felt she could maintain her digital skills and her connection with the device through regular use of the computer. Consequently, the laptop was never put away. She would keep it close at hand, ready for use.

Olga's flat contained other digital devices which were also readily available and used by her family when they visited:

> *Researcher: What about the tablet? Are you using it?*
>
> *Olga: When I can get on to it. It's quicker. I would use that (tablet) rather than that (laptop). My problem is, it's always sitting on there (on the table) and everyone comes and uses it (the tablet), of course, and then when I go to use it, it needs charging. So, I say "Do any of you think of picking it up and taking it over to charge it?" Same with this phone, this morning, and that lasts for weeks without charging.*

Olga explained that her family would use her tablet and mobile phone when they visited and would leave without ensuring the batteries were charged. She also voiced other concerns. Her lack of dexterity and poor vision made her small mobile phone and its onscreen keyboard difficult for her to use. Problems were also created when her mobile phones were mislaid. She thought one of her mobile phones was lost in her flat:

> *I use the mobile. This will be the third phone I've had now. Er I had a decent one, a Nokia which I liked to use and then our 'A' (son) put me on a contract and it was an all singing all dancing phone which was wonderful. It would go on the internet and everything. Couldn't get a phone call. Couldn't answer the phone. You know. So, I give him it back. Got another one bought. I seen one, ten pounds, I thought "That'll do me". "Big numbers. Just what I want". I only had it three weeks and I lost it. We think it's in here but we can't find it. Cos I ain't been out of here, but er my young granddaughter walked in with that one. (Indicates small red phone) She said "I know it's small Nana…er "*

I said "Oh. Thanks very much." It was certainly very good of her to do it. But by the time I've got my glasses on, found out where to press, they've rung off.

Olga's private space in Location 2 was entered and used by her family, who engaged freely with her digital devices. She recognised that they were unaware of the difficulties she experienced, as an older computer user. They were unwittingly compounding her problems, by providing her with inappropriate equipment and depleting the batteries in her digital devices.

Communal space: participants' experience of the shared environment at Locations 1 and 2.

While participants commented on the materialities of their digital devices within their own living space, their lack of control of communal space in their housing scheme was concerning to some participants. The nature and use of the built environment, garden and courtyard were frequently mentioned by participants, some of whom felt that other tenants used these shared surroundings inappropriately, detracting from their own enjoyment of daily life.

At Location 1, Kathleen and Freda had requested that their mid-morning computer group be moved from a shared lounge, close to the restaurant, to a separate Hobby Room, elsewhere in the building. The Hobby Room was small but they explained that it was preferable, as it provided privacy from other tenants, who would arrive early for lunch, parking their wheelchairs and walking frames in the shared lounge, while they waited to be served.

Researcher's notes:

The computer club was in the Hobby Room. Not too much space but they had taken out some of the chairs and there was room for two tables down the middle. It got quite hot after 20 minutes and we had to open the door onto the garden and the other door into the corridor. Freda said she was quite affected by the heat though the temperature dropped quite quickly with the doors open. They all said they would like to be in the Hobby Room again next week.

At Location 2, the use of the shared lounge was experienced differently. Lisa and Denise argued against the Facility Manager's wish to move the computer group from the ground floor communal lounge to a more private second floor Hobby Room. They contended that the Hobby Rom was less accessible, too small to accommodate the three wheelchair users in the

group and lacked facilities for making drinks. At Location 1, the participants' concern was to obtain some privacy for their activities. At Location 2, however, the participants required sufficient space to meet their practical needs. They preferred to meet in a large communal lounge despite potential interruptions by other tenants. In both locations, tension was created because the participants felt they lacked control of the communal spaces they wished to use. However, when the participants had voiced their concerns, their preferred solutions were implemented by the Facility Managers at both locations.

Participants' comments on their shared physical environment highlighted the diversity of their individual needs and experiences. Participants at Location 1 also commented on the entrance to the building, which was surrounded but not encroached on, by patio style planters with flowering plants and shrubs. Four hanging baskets decorated the canopied entrance. While Teresa and Freda remarked that the flowers gave them pleasure, Alan, who is blind, reported that he found the planters to be a trip hazard and commented that he had collided with the hanging baskets, hurting his face. A feature of the physical environment, impacting positively on the quality of life for Teresa and Freda, impacted negatively on Alan who had different needs. While the participants found their experience of their shared physical surroundings could enhance or detract from their quality of life, they also commented on the impact of their social interactions with the care staff and other tenants.

Participants' opportunities for social interaction with the care staff.

Some participants at Locations 1 and 2 commented that they often felt lonely despite the communal nature of extra care housing. They remarked that they would welcome the opportunity for some informal conversation with the care staff, to alleviate their sense of being alone. Wendy, who had speech difficulties, had lived in Location 2 for over two years. She remarked on *'Feeling very lonely and isolated with anxiety and depression.*' While she would appreciate some social interaction with the care staff, she found they were unwilling to converse with her and at times she felt that they rebuffed her attempts to speak with them. At Location 1, Alan also reported feeling lonely. He would have liked to converse with

the care staff and explained that, in his experience, they visited his flat purely to undertake practical activities such as giving medication:

> *They come in here…five minutes or so and they've gone. The only reason I let them do the tablets is that otherwise I wouldn't get anybody to talk to. I go to breakfast at half past eight. Unless they came in to do the tablets I wouldn't see anybody until lunch time.*

He said he felt isolated when they had gone and there was never time for a conversation.

Wendy explained that the care staff were available to escort tenants on recreational visits to places of interest. She had used the service and remarked that whilst the visits were enjoyable, she felt the cost of fifty or sixty pounds, *'for an afternoon out'*, was expensive. She commented that on one occasion, she was invoiced for an afternoon when the carer failed to find their destination. The following week, she said that she provided a map and was faced with an additional charge, *'for fifteen minutes of the carer's time preparing for the visit'.*

Pauline and Olga commented that they had been dissatisfied with the care provided at Location 2 and had employed their own professionally qualified private carers. They expressed greater satisfaction with their experience of care as a result of this change. Olga's private carer was also a relative. Pauline described her private carer, as *'my carer'* and also as *'a good friend who lives round the corner and does my shopping'*. The roles of both private carers involved a personal dynamic that was not present in the relationship between the housing schemes' professional carers and their clients. The private carers fulfilled a social role, encompassing a degree of emotional closeness to the participant, in addition to managing the participants' physical care.

Interactions between participants and extra care staff in relation to ICT

Participants discussed their interaction with the staff, regarding their use of ICT. At Location 1, Alan had sought help with his iPad and was disappointed when he found the care staff unable or unwilling to help:

> *I can't go knocking on any of the doors here and say, "Can you give me a hand with this?" cos to start off with, there's none of them*

know anything about it, you know……The care staff haven't got time. Once things go wrong with that (iPad) the only thing I can do is to sit and wait for Saturday morning (Computer Group) to come round. None of the staff have the time to, or they don't have the knowledge, a lot of them.

Kathleen reported her disappointment because the delivery of her Wi-Fi connection had been promised for Tuesday and it was then delayed by a week. The Facility Manager at Location 1 had offered to set it up for her.

The internet should have been here on Tuesday and Janet (Facility Manager) was going to set it up on Wednesday. It should have been here. (inaudible) E-mail confirms it. It should have been here.

Kathleen subsequently reported that the Wi-Fi connection had arrived the following week and the Facility Manager set it up in Kathleen's flat, after she finished work. Kathleen noted in her diary:

Internet set up tonight so managed to send some emails off.

At Location 1, the Facility Manager had supported Kathleen's acquisition of an internet connection by installing the connection for her. At Location 2, the Facility Manager did not provide that support and Denise reported relying on Olga's grandson to help her install her Wi-Fi connection:

Researcher: Has somebody been and set up the internet for you?
Denise: Someone has helped me set that up. Olga's grandson has the skills and put the internet on. We got that done between us. That's done.….That's all set up.

Pauline, at Location 2, said her private carer helped her to use the internet. She described her experience of purchasing books and making travel arrangements online with her carer's help. She also planned to follow up her literary interests online, when she had time available in her schedule:

I will, I will use it to look up things I can search, and things like that, at the moment, I've been through Thomas Cromwell and I'm going to do Baudelaire's Les Fleurs du Mal and all that. Oh yes, I'm going to do that. But I can't do it until Thursday because tomorrow the hairdresser's coming out and then Wednesday morning I've got an English Literature Class in town. I'll get back here about 1 o'clock. I might do it after that. On Wednesday afternoon. If not, then, it will be Thursday before I can get down to it. Looking up Baudelaire and Fleurs du Mal and all that.

The participants have reported positive outcomes when the extra care staff or a private carer were able to support their use of the internet. Where staff

support was not available, participants have relied on each other, or the computer group, to find ways of overcoming their difficulties with ICT.

Opportunities for social interaction between tenants - the social programme at Location 1

The built environment at Location 1 was designed to provide opportunities for informal social interaction when tenants came together in the corridors, shared lounge, onsite restaurant, hairdressing salon and corner shop. Activities and outings on the social programme were advertised to tenants through a weekly newsletter, produced by one of the participants, in collaboration with the Facility Manager. Forthcoming events were also advertised on a notice board at the entrance to the restaurant.

Weekly activities on the social programme were principally focussed on games and pastimes - Dominoes, Prize Bingo, and a Games Afternoon. There were also weekly armchair exercise sessions, a film evening, and an arts and crafts afternoon. Themed suppers in the restaurant were identified as enjoyable opportunities to be with other tenants in a social situation. The computer group, which I facilitated, had been established at the tenants' request and met weekly, on Saturday mornings for five years, from 2011 to 2016. Occasional outings by coach, to places of interest, monthly coffee mornings and a monthly religious service completed the regular social programme at Location 1.

Opportunities for social interaction between tenants - the social programme at Location 2

At Location 2, the built environment also created opportunities for informal social interaction between tenants using the lounge, restaurant, hairdressing salon and corner shop. A hot lunch was provided, daily, in the restaurant and some tenants would meet and socialise in the lounge before lunch, and again in the restaurant at lunch time. Others took their meal away, to consume in their own flat. Wendy, who had speech difficulties, was concerned about the social aspects of lunch time, fearing that her limited speech would mean other tenants would avoid sitting next to her. She often remarked, *'I'm frightened of going to lunch.'* She found that some tenants did avoid her, while others were more welcoming.

Consequently, she commented, by planning ahead, she hoped to arrive in the restaurant with a tenant who would speak with her during lunch.

Organised activities at Location 2 were advertised to tenants on a noticeboard in the main entrance to the building. Activities included weekly coffee afternoons and occasional quiz nights, followed by a fish and chips supper. Fish and chips suppers were said by the manager, to be popular with the tenants and were also provided, after fireworks, on Bonfire Night and on other occasions throughout the year. The manager indicated that dominoes, jigsaws, games afternoons, film nights and croquet were introduced but were not adopted by the tenants. A computer group, which I facilitated, met weekly for two years in the lounge at Location 2. From 2014 to 2017, I also provided one-to-one computer training, on a weekly basis, for a participant with multiple health issues.

Opportunities to socialise with other tenants at Location 1

The social programme at Location 1 was outlined earlier in this chapter (p.156). The participants' pen portraits have indicated their personal circumstances, the nature of their social networks and their ability to use the internet for social contact.. The participants' experience of the social programme at Location 1 varied considerably. Kathleen's diary data shows her day filled with organised activities and how these are interwoven with her use of communications technology for social and instrumental purposes:

> *Didn't have time today to do much (on the computer) as I was (helping) in the shop this morning, art class for an hour this afternoon, before I went to the hairdressers. Whist drive tonight.*

Kathleen explained that while the Whist Drive was part of the Social Programme at Location 1, it was also attended by residents from the local town. Kathleen said she was occasionally in contact, online, with one local resident, exchanging news and jokes with him, between their weekly face to face meetings at the Whist Drive. Thus Kathleen's use of the internet for social contact, supported and extended her social circle beyond the housing scheme. On another occasion, Kathleen noted in her diary:

> *Apart from phone calls and texts to granddaughter haven't had time for anything else. Shop this morning. Learning to do Faberge eggs*

this afternoon and organising a Chinese evening was all I could manage! Used the laptop to find things.

Kathleen's diary entry again indicates social contact, externally to the housing scheme, interwoven with organised social activities within the housing scheme, supported by her use of the internet.

In Teresa's diary, she reflected on her experience of some organised social activities:

Played dominoes….Due to 'Betty' making a few arguments we only got through six games. 'Betty' won the most. We all had a good laugh about it.

Went out on a trip with a group of ladies to Tynemouth. Had a lovely day but the weather was quite cold and windy. I couldn't stay outside because the wind was too rough. Went into the town and had Fish and Chips. I really enjoyed it.

She also noted some online social interactions, supported by her son and the computer group tutors:

We had a look at some pictures on the internet done by a farmer. There were 45 altogether. [Sent by her son. Viewed with the help of computer group tutors] Sent two messages on the internet. Phoned two friends.

Teresa was using the internet and the landline to communicate with her wider social network.

Data from Kathleen and Teresa's diaries indicated that they found the organised social activities to be accessible, stimulating and enjoyable and these activities were sometimes interwoven with online social contact. Helen also commented on the interweaving of her online and offline social activities:

Helen: and if she [daughter] can't get me because sometimes, well quite often, I take part in things, and I'm not in, when she phones, that's when it happens.

Researcher: She'll send you an e-mail?

Helen: Yes. She says that she'll ring later and a little bit of news on it and so forth…Until she contacts me again, that sort of thing.

Thus, for Helen, taking part in the Social Programme did not preclude her from social contact with her daughter, due to the asynchronous nature of their online communications.

Alan, however, found that his visual impairment excluded him from many of the activities on the Social Programme:

> *There's no social time, for me, unless I do needlework, or art...which is why I come to the computer class…….I can't do art… I can't play Bingo, can't play dominoes, can't play cards. There's no other activity going on in here that involves anybody who can't see.*

Alan felt that his visual impairment was not addressed within the Social Programme. Most of the activities were unsuitable for him, and, he commented that adjustments were not made to include him, as a blind person. Whereas Teresa and Kathleen found the Social Programme brought them into contact with other tenants and enabled them to enjoy spending time together, Alan was unable to participate. Alan was already experiencing feelings of loneliness within the housing scheme and the Social Programme did not provide him with opportunities for social contact.

Freda also seemed less likely to participate in the Social Programme, preferring to interact with others in her own way:

> *If someone comes up to me and we get on, that's fine, but I don't put myself forward.*

She said that the social environment at Location 1 was unstimulating and she found using the computer an interesting challenge:

> *It keeps the brain active. If you don't use it, which you can stop doing in here, you can just fade away.*

Freda's diary data made reference to the computer group meetings and instrumental interactions using the internet on behalf of the Facility Manager and other tenants at Location 1. Freda noted in her diary:

> *Received two emails from Dutch Garden Centre, Holland.*

She elaborated:

Freda: Oh yes, they (Dutch Garden Centre) sent me 2 e-mails. I don't order from them but (Facility Manager) wants them.

Researcher: Is she going to order some?

Freda: She's going to order some tulips. She ordered some last year too. (Inaudible). They were some of their originals. They were about 3 feet high when they came up… Some of them were gorgeous. She wants them for here again, for the garden. She wants to order them.

Researcher: Is it somewhere you have visited?

Freda: (Daughter) took me too it, to the bulb fields. It was nice there. She wanted me to see it.

Freda has continued the connection, established by her visit to the Dutch Garden Centre, to enable the Facility Manager to order their particular variety of tulips for the garden at Location 1. This connection has continued over time. It has supported Freda's offline relationship with the Facility Manager, provided Freda with a social role as the person with the link to the Dutch Garden Centre and also been a reminder of her outing with her daughter.

Freda explained that her online activities could be interwoven with receiving contact from her family. The following passage is an extract from a discussion to clarify Freda's diary data:

Researcher: [Reads from the diary] One hour looking [on the internet] for suppliers of beads.

Freda: That was for 'Jane' [tenant] and I wanted some new, a thing, clasp, earring clips and I got some beads as well and then I had a video message from 'Carol' [daughter]. I knew she'd been on. She tried to Skype me and I wasn't there, so she sent a video message.

The passage indicates the multi-layered complexity of Freda's interactions using the internet. Her instrumental use of the internet supported her offline social relationship with 'Jane', and their shared interest in jewellery-making. Freda's use of Skype enabled her daughter to make her aware that contact was there, although Freda had missed her daughter's Skype call.

In this intertwining of online and offline social interactions, Freda was in control. She knew that her daughter had tried to make contact but she was able to delay her Skype call with her daughter until she had completed her personal business and responded to 'Jane's' request for assistance with an online purchase. Using the internet, Freda was able to maintain her social roles as knowledgeable internet user and mother. She could sequence activities that would otherwise have taken place simultaneously and been difficult for her to manage.

Opportunities to socialise with other tenants at Location 2

The Social Programme at Location 2 has been outlined earlier in this chapter (pp.156-157). The participants' pen portraits have indicated their computer use, internet skills and personal circumstances. Their experiences of the Social Programme and opportunities for social interaction at Location 2 varied considerably. Participants have articulated these experiences through their interviews. There is no reference to the Social Programme at Location 2 in any participant's diary data. However, Denise noted in her diary, a social role she occupied in respect of the visiting hairdresser:

> *hairdresser sick asking me to inform various people in the housing scheme*

Lisa commented that lunch could provide a regular opportunity for social interaction, for tenants who spend most of their time alone in their flat.

> *Some of them (tenants) are in their flats … and not too good and enjoy a bit of a chat. …. Instead of sitting in their flats all day. I mean, they have a break for dinner and that's it, you know, they just go back to the flat.*

Lisa remarked that tiredness or inertia meant that tenants did not always take advantage of the opportunities for social contact that were available in the housing scheme:

> *We have a coffee afternoon. We don't get many down because they say "Oh, I'm tired in the afternoon" and of course it's half past two! They don't like getting out of the chair…. (Laughs) That's it, I mean, when they go down, they start talking to each other and they get interested and they talk to each other….Instead of talking to the telly.*

Lisa saw how the coffee afternoons could contribute to the quality of life for tenants who would otherwise be alone with their television sets for company. She also commented on Wendy's attempts to socialise during the coffee afternoons:

> *Lisa: We had a coffee afternoon and were talking about things… It was nice she (Wendy) could get involved.*

Lisa realised that the coffee afternoons provided an opportunity for tenants to come together and for Wendy to feel included in their social interactions. She understood Wendy's speech problems and described how she and other tenants offered Wendy support when she struggled to express herself:

> *Lisa: When she (Wendy) gets really stressed, she can't speak and we always say to her "Slow down". Eventually you can understand her….*

Lisa was critical of *'other people'* who responded to Wendy's communication problems by avoiding contact with her:

> *Lisa: but other people, it's awful really, because they don't sit next to her and things like that, you know, because it's difficult.*

Lisa was aware that Wendy's opportunities for social contact were limited by other tenants' unwillingness to engage socially with her. Wendy also commented on the attitude of some of her fellow tenants:

> *Wendy: I hate it here.*
> *Researcher: Why do you say that?*
> *Wendy: Because people don't take the time or trouble to get to know me.*

Wendy acknowledged that she needed more time to express herself, than *'people'* in Location 2 were willing to give her. This added to Wendy's difficulties in establishing and maintaining her social relationships within the housing scheme. Although opportunities for social contact were provided, they did not address some participants' complex health issues that made it very difficult for them to benefit from those opportunities.

Denise made no reference to the Social Programme at Location 2 but her interviews indicated informal social contact between some computer group members. The focus of these interactions was the provision of

mutual support with their digital devices and the development of their online communication skills. (See pp. 180-181).

Pauline did not refer to any positive interactions with other tenants but did describe a problematic relationship with a male tenant at Location 2.

> *Pauline: A guy on my table (at lunch) said to me yesterday "Has it finished?" and I said, "Has what finished 'Colin'?" and he said "The tennis" "Oh yes. The final was yesterday" and he said "Thank goodness for that. Now have you time to talk?" He said, "My daughters want to meet you". "It's very kind and I'm keen to meet them 'Colin'"*
> *(Pauline adds "Not really")*
> *Researcher: Does he live here?*
> *Pauline: Yes. (She explained that she tried to avoid him). One day I was going down for my lunch and I saw him come down the corridor at the far end and one of the carers came down and I spoke to her. Ten minutes later and he's still waiting.*
> *Researcher Was he waiting for you?*
> *Pauline: Yes. In the armchair facing my direction. I couldn't turn round then. He went outside, sitting there on the seat outside. Waiting for me to come out. Then he called me. He said "Are you doing anything this afternoon? Are you busy?" I said, "I'm very busy, watching the tennis". I've got no excuse now.*

Pauline's experience of unwanted social contact with a male tenant, illustrates one of the challenges of communal living - the difficulty of 'keeping your distance' when strategies used to regulate physical and social distance do not work. The housing scheme is designed to bring tenants together and facilitate social interaction. However, that closeness can also create a problem if the tenants are not able to maintain sufficient distance to feel comfortable in their environment.

The tenants' access to computer groups, communal computer equipment and shared internet connectivity

The computer groups at Locations 1 and 2 were not part of the Social Programme in these housing schemes. However, they were available to all tenants and provided an opportunity for tenants to come together for learning and in pursuit of a shared interest. In 2010-11, I established a computer group at Location 1. The initiative came from the tenants, in conjunction with the Local Authority Activities Organiser. Some tenants stated they had no experience of using a computer while others had some

basic knowledge and wanted to use the internet. Their request was passed to the Local Authority Adult Education Service where I was employed, with a remit to provide training opportunities for the local community. With support from the Facility Manager, a computer group was established at Location 1, with the intention of starting early in 2011.

As a result of local government funding constraints, the local authority withdrew its financial support for the group in late 2010. I then approached a local charity which agreed to fund the training and after a transition period with the local authority, the charity also provided laptops and a mobile Wi-Fi connection. (There was no internet connection available to tenants in Location 1.) The computer group went ahead, after a short delay, in early 2011, with a colleague and I providing the training (See also Chapter 2, pp.16-17).

The computer group at Location 2 was established in 2012, with the initiative coming from the Facility Manager, following interest from tenants and a recommendation from the Facility Manager at Location 1. Some tenants had prior experience of computing, while others were complete beginners. I established the group and taught the participants, again, with help from a colleague. The group was initially funded by the local charity and later self-funded by its members. Although tenants wished to use the internet, they had no internet access on the premises and were reliant on the mobile Wi-Fi which I brought to the training session.

Given the tenants' interest in using the internet, the Facility Manager at each location, articulated their intention to make a communal computer and internet connectivity available for all tenants. At Location 1, the manager subsequently entered a competition run by the housing provider, whereby fifty competition winners would receive a computer, printer and twelve months free internet connectivity for their housing scheme. The housing provider explained that there was insufficient funding to make internet connectivity permanent or to install an internet connection across their portfolio of older people's housing.

While Location 1 was a competition winner, participants reported that delivery and installation of the equipment took a further six months, with a communal computer and temporary Wi-Fi provision being installed in

2013. There were problems with the router and a weak signal led to a lack of connectivity in flats on the periphery of the building. Teresa commented:

> *I nearly cried when the signal would not reach my flat.*

Wi-Fi was available in most participants' flats but they continued to report problems with the router. Alan remarked:

> *The use of the iPad is limited and it keeps telling me it is not connected to the internet. It has become a bit of a farce.*

Over a period of time, Alan became accustomed to using the internet, investing in his own extender to improve the signal strength (See pp. 149-150). The loss of a connection was keenly felt. He remarked:

> *Last weekend and last night the internet was down. It was the router in the lounge that was down. I tried switching my extender off and then back on but it did not work. I was lost without it.*

The internet had become integral to Alan's life.

At both locations, the participants had been engaged in the competition process and had looked forward to a successful outcome. However, at Location 2, the manager was unsuccessful in the competition and received no communal computer equipment or internet access for the tenants. At the time of writing, seven years later, the situation remains unchanged, with no shared computer or internet access available for tenants at Location 2.

At Location 1, the communal computer, was situated in the hobbies room, and made available for use by tenants and their visitors. It was accessible using a password protected log on. Microsoft Office was available as Office Online and documents could also be created in Google Docs, with two stages of password protected access. For a document to be printed, a PDF file was first created. The housing provider installed the system and advised that this configuration was necessary to protect the privacy of individual users. The participants reported receiving little training, from the housing provider, and found the computer's configuration confusing.

The process of accessing an application, creating and printing documents from this computer proved too complex for the participants who reported

that they had rarely used it. They advised that the computer was used occasionally for internet access but the Microsoft Office and Google Docs applications were unused.

In addition, participants commented that the housing provider intended to charge them for Wi-Fi provision, after the initial twelve months of free usage, and the charge would be added to the rent of all Location 1 tenants. As Freda and Kathleen already had their own Wi-Fi contract and many tenants did not use the internet, the future of Wi-Fi provision at Location 1, has continued to be uncertain.

The impact of local government austerity measures and insufficient funding from the housing provider led to delay, uncertainty and competition for scarce computer resources between housing schemes. The purchase of an inexpensive router at Location 1 meant that coverage was limited and some tenants received no wireless signal in their flat. The computer's complex configuration, utilizing only free software, made it largely unusable for those whom it was intended to benefit. Some participants commented that they felt marginalised in the housing scheme. Teresa remarked '*You can feel very alone here*' while Alan who was sixty four years of age, stated:

> *Ninety percent of the people are over eighty. There's nobody to talk to except the staff, from morning to night. I can't go out. I can't see my family…*

Despite its sometimes patchy availability, using the internet provided Freda and Kathleen with regular family contact, while for Alan and Teresa, there was an opportunity to extend their social circle beyond the housing scheme.

Support for the communal computer and Digital Champions

Following the delivery of the communal computer to Location 1, the housing provider's ICT specialist made a visit. Tenants were invited to meet him for individual training on the computer. Participants who attended, commented that they found the sessions were too short and they had difficulty recalling the sequences they had been shown. The housing provider adopted the Digital Champions approach, to address tenants' need for ongoing ICT support. Digital Champions are individuals with ICT

skills, engaged, often on a voluntary basis, to support others in their locality, who lack basic digital skills. The housing provider's ICT specialist was tasked with establishing a network of Digital Champions, drawn from tenants, across the provider's portfolio of properties. Thus day to day support would be devolved to a Digital Champion at each location. Tenants with knowledge of ICT were invited to become Digital Champions. At Location 1, Freda was approached to become a Digital Champion, but declined, commenting that she did not wish to assume responsibility for training others. No tenant at Location 1 was subsequently willing to accept the role.

Limited training on the shared computer and an unreliable Wi-Fi connection, compounded some participants' feeling of digital exclusion at Location 1. At Locations 1 and 2, most participants subsequently made their own arrangements for internet connectivity and obtained their own computer equipment, rendering the housing scheme provision at Location 1 largely redundant. Details of the participants' own digital devices can be found in their pen portraits (Chapter 6, pp. 131-140) and Tables 5a and 5b (Chapter 6, pp.142-143).

Summary

Chapter 6 has provided an introduction to the ten participants, based on their individual pen portraits and Wordles, derived from their interview and diary data. The rich descriptions illuminate the participants' daily life, their use of ICT, and their social relationships. The data collection methods have enabled the participants' recall and reflections on their experience of online social contact to be documented from interview data and visual representations of their use of communications devices, in everyday life, to be seen from participant diaries, in the immediacy of the moment. These perspectives complement each other, in highlighting diverse aspects of the participants' experience of using the internet for social contact, in the context of life as an extra care tenant.

To enhance understanding of the context of the participants' lived experience, details of the two extra care housing schemes' size, geographical position and shared facilities for the tenants were also

provided. Social relationships are central to this study and the participants' opportunities to socialise within their housing scheme were explored. The participants' digital devices and their opportunities to access the internet for social contact were also considered. The provision of communal computer equipment and internet connectivity differed between the two research sites. These differences in provision were lastly reported and discussed, providing a basis for understanding the participants' situated perceptions and experiences of online social contact.

Chapter 7 Joining the digital world – becoming an internet user

Introduction

In Chapter 6, the participants were introduced, their physical environment and the opportunities for social interaction, within their housing scheme, were presented. A potential role for online social contact was indicated, as some participants remarked that they were lonely as extra care tenants and felt distanced from their family and long-term friends. In Chapter 7, the participants' journey to becoming internet users is explored in depth. This chapter presents an analysis of the challenges and achievements that the participants experienced, as their use of the internet for social contact, led them to re-shape their approach to their social and digital worlds. The participants indicated that these challenges were practical (there was no Wifi in their housing scheme), emotional (they encountered some negative attitudes to their internet use) and physical (their own health issues and age-related limitations). However, they explained that drawing on their own resources and with some tuition, familial and peer support, they were able to start communicating online.

Participants' response to the absence of internet connectivity in Locations 1 and 2

At the commencement of this study, no internet connectivity had been provided for tenants at Location 1 and 2. The participants recounted the tension they experienced between their aspirations to become internet users, the need to establish their own internet contract and the risks they perceived were associated with their lack of online experience. Denise's remarks, early in the study, highlighted her perception of risk and her lack of confidence in her own skills:

> *I'm not skilled enough. I don't think I've got enough protection against any problems; you know. I have no idea what could be happening…*

Participants articulating their decision to engage in a contract with an internet services provider, said they were guided by their own wishes, advice from family and friends, cost and an awareness of the resources already available to them. However, not all advice was perceived by

participants as encouraging, and some participants commented that their family actively discouraged their use of the internet. Kathleen recounted a conversation with her granddaughter, when she expressed her wish to install her own internet connection:

> *I said, "I want to get the internet" and 'Grace' (granddaughter) said "No, you're not to." I said, "Don't tell me what I can and can't do" and she said, "But you'll always be on the phone wanting help!"*

The lack of a communal internet connection made it necessary for Kathleen to enter into a contract for unfamiliar equipment and overcome the barrier of negative familial attitudes, to obtain the basic infrastructure of internet use. Her successful resolution of this issue, with help from the Facility Manager at Location 1, is reported in Chapter 6 (p. 155).

Earlier in the study, the housing provider installed an internet connection, on a short term basis, for tenants at Location 1, but no connection was provided at Location 2. At Location 1, the temporary nature of the internet connection concerned Alan. He commented:

> *Alan: I've been told now that I might get this new computer so I'll have to get it [a private internet connection] to get the internet.*
> *Researcher: Well not necessarily because you've got the tenants' internet connection.*
> *Alan: Yes, but that's only to the end of the year. Only to the end of November. So, G (Manager) can find out who wants what, where? There isn't enough signed up for it yet so it won't be viable. It's not worth them going to the expense of putting it in again if only six people would use it out of thirty six.*

The housing scheme management would only make a short-term commitment to providing an internet connection for the tenants. Alan explained the dilemma he faced in making a long-term commitment to a contract with an internet service provider:

> *I know, from the experiences I've had - is it worth taking a 12 months contract out? Will I be here in 3 months' time or six months' time?*

However, he recognised that to be sure of internet access, the commitment may become necessary. He reported his conversation with the charity worker who was providing his new computer:

> *So, I said, "Right. I'll have to get my own [internet connection]. There's no way round it."*

Alan's wish for continuity of internet access led him to overcome his own doubts, initiate a change in his approach and consider installing his own internet connection.

However, for some participants, poor health, anxiety and depression undermined their ability to obtain an internet connection of their own. Helen found that her declining health lessened her interest in a private internet connection. Her increasing frailty was in tension with her uptake of online social contact. She commented that her capacity to engage with new experiences was diminishing with her advanced age:

> *Yes, I've always done things…but there comes a time when you just can't do it….Living is a big thing when you get to ninety, it's different, shall I say. Yes. I was always interested in everything but I think now I'm not. Well, I'm still interested but not to participate.*

Helen said that she felt that the process of establishing her own contract with an internet services provider was beyond her capability.

Similarly, when Wendy was asked about communicating independently online she explained that she could not overcome the anxiety attendant on her use of technology. She commented:

> *Lack of confidence is part of the anxiety which is with me all the time.*

Although she used the internet with help, Wendy was unable to overcome the fear that inhibited her from installing her own internet connection. The participants' comments indicate that their ability to establish an internet connection of their own, was impacted by their health status, with those in poor health being less likely to take out their own contract.

Adopting online communications - building confidence

At the commencement of this study, Freda, at Location 1 and Olga, at Location 2 had already acquired their own laptop and arranged a contract with an internet service provider. At Location 1, Kathleen initially approached the issue of internet access collaboratively, by sharing an internet connection with Freda until she was sufficiently confident to establish her own internet service contract. Similarly, at Location 2, Denise and Lisa shared Olga's connection until they felt able to arrange their own

internet service contract. Teresa expressed a more conflicted approach to using the internet:

> *Researcher: How do you feel about using the internet?*
> *Teresa: I'd like to, very much. I would. I think, you know, I might be more advanced later on.*
> *Researcher: You are probably more advanced than you think, already…There's quite a lot that you can do...*
> *Teresa: Mmm.*
> *Researcher: What about contacting people over the internet?*
> *Teresa: I don't know about that.*

Teresa then envisaged a friend's reaction to receiving an email, from herself:

> *I've got two friends…There's one friend who will get quite a shock.*

Teresa explained that her family was technophobic, citing her brother's situation as an example of emotional disadvantage stemming from non-use of communications technology:

> *My brother's not on the computer at all. I think he might have been a lot happier if he had been.*

Denise also remarked that her relatives were surprised to receive her first email:

> *I sent an email to our 'Joyce' (Sister) and they were shocked because normally I don't use computers. I sent one to them at the right address and they were shocked.*

Teresa and Denise indicated that they were aware of family and friends who did not anticipate their use of the internet for social contact. They recognised that their friends and family held an understanding of their aptitudes and skills, which did not include an ability to communicate online. The participants' comments also suggest that they may have challenged themselves to exceed expectations, but familial assumptions about their capabilities may also have undermined their self-confidence. For most participants, their appropriation of the internet was a gradual process which involved building their confidence, before committing to their own internet service contract. However, the problem of online social contact was more complex for Teresa, due to her lack of self-confidence and the nature of her relationship with her son.

The impact of familial attitudes

While most participants established their own internet connection, some continued with no personal Wi-Fi and said they experienced the lack of internet connectivity as an ongoing problem. Teresa was initially cautious, commenting:

> *Using the internet (pause) I feel a bit worried about that because you never know where you are going to land yourself. I'll end up buying something I shouldn't.*

She was afraid of losing control and potentially losing some of her money. She reported that when the free Wi-Fi connection was installed in the housing scheme, on a trial basis, her son would not connect her computer, stating that she '*was alright as she was.'* Her son had adopted the role of gatekeeper, to prevent Teresa's use of the internet. When asked about acting independently to use the available connection, Teresa said *'I'm frightened of it.'* When she was asked about her son's attitude to her internet use, she said, '*I've got a problem child. No. I'm the problem child.'* Teresa recognised there was a problem with her son's approach but was unwilling to address it, preferring to blame herself and thus reversing the parent /child relationship to place herself in the role of child, with her adult son taking the decision for her.

Kathleen had reported that her family's negative attitude initially discouraged her use of the internet. However, through the use of Freda's internet connection, to familiarise herself with the technology, and gradually, with practise, she developed the skills and confidence to communicate independently online. She considered her own progress and, during her second interview, Kathleen explained how she felt about forwarding humorous emails to her friends and writing her own emails to her cousin:

> *Well... I send them on, which I found more difficult to start with, but you showed me, and I tried it, sending it straight away to someone else, which I found I could do, and you know, a little each week, it's a little bit easier…it's a bit easier and then I can send messages, you know, write, which I do to my cousin*.

Teresa, however, found it more difficult to act independently. The view that Teresa was '*alright as she was'* (without an internet connection in her flat) was her son's perception of her situation, rather than her own. Teresa

was aware that her son had the necessary skills to support her internet use but he declined to help her. Kathleen found that over time, she gained sufficient confidence to act autonomously to install and use the internet, despite the negative attitude of her family. Teresa, however, did not have the capacity to act autonomously. For Teresa, the fear of crossing the boundary set for her, by her son, was greater than her own wish to access the internet independently.

Financial implications of a personal internet connection.

Commitment to a contract with an internet service provider was a responsibility which the participants reported taking seriously, exploring their options and taking advice from family, friends and other participants before making a decision. Cost was said to be an issue for many of the participants. Lisa recounted her deliberations and hesitancy before she advised Olga that she had arranged her own internet connection.

> *I said (to Olga), By all means I'll pay towards the broadband, oh yes. But as you say, it's not worth getting… I mean there's that many offers on now, you know. Sky, actually, they had an offer on, I think it was only £5 a month for a year… As I say, if I do get one…well I've ordered it now!*

For some participants there was an element of competition to obtain the most favourable contract with an internet service provider. Their exchange of information on contracts and providers created an opportunity for some participants to learn from the experience of others. Denise commented on Lisa's contract:

> *Lisa's done quite well… Mine still works out cheaper but even she's got quite a good deal.*

Denise expressed some pride in obtaining privileged customer status with British Telecommunications (BT). She described her 'cat and mouse' relationship with the internet service provider until she finally accepted their offer:

> *They constantly used to send me like deals, on the internet, like £2.50 for....you know…they were so desperate to get me to do it, so I held out and held out and eventually got it for some ridiculous amount like £7.50 for three years or something….They were desperate to do it. I was a privileged customer. They did actually send you a different code, oh yes. They gave you it to try and get you. If you really held out on them and they really, really, really wanted… they'd tried everything and when they sent me this one, I thought "I need the*

internet. I might do it now". And it was such a good deal really. It's costing me next to nothing.

Denise's attitude to obtaining an internet connection had changed over time and she was ready to accept BT's offer. Her contract with BT increased her self-esteem. She felt she had become a successful contract negotiator and a high status customer for BT's internet services. She also indicated that there were other considerations when she selected BT as her internet services provider:

Olga's got BT...That's why I looked at the BT one. I thought it would be easy. I'm already with BT, so I thought it would be easier really.

Denise referenced her offline relationship with Olga as a factor in her decision. She considered Olga's experience with BT in choosing BT to provide her own internet connection.

Participants' concerns with making payments online

Freda also established her internet connection with BT and had become a confident user of email and internet search functions. She said she opted for BT's online billing system but found it problematic. She asked the company for clarification but was perplexed by their response to her queries:

Researcher: You said you phoned BT to sort out your bill online. Is it sorted out now?
Freda: Not really. They sent me an e-mail and I sat for an hour trying to understand the e-mail they sent. I'll have to ask them to send it (the invoice) by post. I don't know why they had to change it. I don't like to keep using passwords.

Freda found the online billing system confusing and said she had difficulties with spelling which made her prone to error, when she needed to use passwords to access the system. She said that she preferred to *'speak to a person'* when making a payment.

Denise was also concerned about incurring financial losses when paying online. She described her precautions against internet theft:

No. It's the money. It really does bother me. My brother-in-law does all that. Firewalls, virus walls, I don't know what he had built into it. (Her laptop) I've never known anything like it. Just to make it safe.

Denise used an offline familial relationship to address her concern about online security. She wished to make financial transactions over the internet and was aware of the need for security but felt that she did not have the skills to ensure her finances were secure. Consequently, she relied on her brother-in-law's knowledge of security systems to address her concerns. She engaged her brother-in-law to fill a gap in her own knowledge.

Freda commented that she had expected payment online to be a convenient and cost-effective option, however, security, ease of use and trust in the system are important for user acceptance as illustrated by Freda and Denise's remarks. Freda said she found her internet provider's instructions for using the online payment system 'too confusing'. Technical language and the requirement to repeat passwords increased the complexity of the process for Freda, who was beset by difficulties as she tried to make a payment online. Freda subsequently reported that she had withdrawn from online billing with her internet service provider, due to the complexity of the process.

The participants' experience of acquiring computer equipment

At the commencement of this inquiry, the participants had articulated their impressions of the digital devices in their possession. Helen, Pauline and Freda owned a new computer or laptop and reported few problems with their devices. While Helen recounted how she had some initial reservations about acquiring a laptop, these were overcome when she started to receive emails from her family:

> *Researcher: How did you get the computer in the first place?*
>
> *Helen: My daughter would buy me it. She likes me always to be up-to-date. I don't always want to be. But, yes. And she always says, "You can do it"… and so she'll say, "Oh you can" and I'll say, "I don't really want to do it, you know, I don't fancy it ."*
>
> *Researcher: You seemed to be pleased when you got those little videos of your great grandson. (Referring to e-mails opened in the Computer Group) You seemed happy to get those.*
>
> *Helen: Yes. (Emphatic) I like the product. you know, what is it? The fulfilment of it. That sort of thing…Oh yes. That was great…I had a lot, didn't I?*

Five participants, Kathleen, Alan, Olga, Teresa and Denise had an old laptop, iPad or PC. These devices were mostly second-hand computers

which they had received from friends or family members. Denise described her laptop as:

> *the great big fossil that I've got there. It's that heavy you virtually break your arm. It is so heavy. It's like the old mobile phones used to be. It's so heavy I don't know how I hold it. I used to practice my typing on it. Eventually I know I'm going to have to have [a new] one. Eventually they'll come down in price.*

Kathleen noted in her diary that there were problems with her second-hand laptop. Like Denise, she also anticipated replacing it:

> *I am so disappointed with the laptop my daughter brought me as it just crashes after I have been on it for a little while. Apparently, the battery is done altogether. I'll have to get a new one.*

Kathleen took action herself to replace the second-hand laptop. She recounted her subsequent conversation with her daughter:

> *'Kerry' (daughter) was here last night and she saw the new computer and didn't like it. She said "Is that a new computer? Who bought you that?" I said "Actually, you paid so much towards it and I paid the rest myself." (She gave me £100 for my birthday) She said, "Well, why did you get one?" I said "Well that other one was hopeless. It was slow, it needed a new battery, so I had to take the thing (lead) through all the time, so you're pulling the plugs out and it isn't easy. I don't find it easy. And it needed a new battery and it needs a camera." She said, "The camera's there" and I said, "You know it wasn't." I said, "That chap (IT specialist from the housing association) looked for it and he found it and said it wasn't working." "So," I said, "I just had a new one". So now I have two laptops.*

Kathleen had acted autonomously to provide herself with a fully functioning new laptop, appropriate to her own needs. She had challenged her daughter's view that an old laptop with no camera and a defective battery would be sufficient to meet her mother's requirements.

Alan's second-hand device was an iPad on loan from the housing provider. He commented:

> *Alan: I'm a bit disappointed in this old system (iPad from the housing provider)… it just hasn't worked out really.*
> *Researcher: How do you mean?*
> *Alan: I can't seem to manage … Things go wrong with it and I lose off on it.*

All second-hand devices were reported by participants as 'giving them problems'. During the study, the five participants with second-hand devices, remarked that they had replaced their old devices with new equipment, or a more modern second-hand device. They all said they perceived the replacement equipment as being more appropriate for their needs. Alan acquired a new computer and subsequently purchased many internet-ready devices and technological 'gadgets'. He explained how he purchased the computer:

> *They phoned me up from Sheffield….Blind Vets. (Blind Veterans Association) The trainer there said he could get me a computer, if I paid £400. This (iPad) has to go back. This is £400 anyway. So I might as well buy me a new computer. I know I won't have one of these (iPads) then. They would supply me with a computer. I don't know what kind. He would get me a computer, keyboard, the whole works.*

On her daughter's advice, Freda replaced her relatively new laptop with a second new laptop, from a different manufacturer, and also purchased an iPad. Helen and Pauline continued to use their new devices which they reported as meeting their requirements, while Olga continued with an old laptop and acquired a new tablet computer and smartphone. Denise updated her computer equipment, explaining her decision to purchase a tablet computer:

> *I've got a different…I've got a laptop which is useless really, it's an old one of K's (Friend & former extra care tenant) and I bought a tablet. I was going to buy a Smartphone but I thought I needed to get on the internet…but that was too small. It was too small again. So, I got a tablet because I thought that was big enough and the cost, it was cheap as well. (a. the cost and b. the size of it) So I got a tablet. It was quite easy really.*

Denise's comments on the small size of a Smartphone echoed Olga's comments on the difficulty of using her small mobile phone while experiencing poor vision and loss of dexterity (pp.151-152). Olga also had problems viewing images on her granddaughter's smartphone. She remarked:

> *One of my granddaughters had these photographs on her phone. I don't know where she got them from but I couldn't see them because they were small on the phone.*

Olga's family then transferred the images to Facebook to ensure that she could see them. Olga described what happened:

> *So, she (Granddaughter) said "Get them upsized Nana on Facebook." So, he (Son) was going into it (using Olga's laptop to access Facebook) er one of the problems was "Ha" he said "Mother, I don't know how you manage on this."(old laptop) It's that slow, evidently, mine, you see I don't know the difference. "Well", he said, "Ah, we are going to be here all night." So, he wasn't very happy but we eventually got to the page…*

Here younger people included an older family member in activities involving technology, but became frustrated, by the older person's out-dated equipment. The situation had developed because Olga was unable to see images on her granddaughter's smartphone, due to their small size. Technology suitable for a young person, was unsuitable for Olga, as an older individual, experiencing some loss of vision.

While Olga had reported that she owned her own laptop, Lisa and Wendy had no digital devices at the commencement of the study. Lisa commented on her sister's reaction to her proposal to purchase a laptop:

> *I was going to buy one (laptop) of my own, but our 'Jennifer' (sister) said "Don't. You might not be able to use it."*

Lisa modified her approach to acquiring a digital device, as a result of her sister's attitude and decided to purchase a tablet computer, rather than a laptop. She chose a tablet computer of the same type which Denise had purchased and remarked on the ambivalent family attitudes to her decision:

> *I've asked my sister, as well, (mimics her sister) "You don't want to get one like Denise's you know. You're better getting..." I've said "I'd like one"... Anyway, my daughter's ordered me one. You know, it's ideal, you know, for short, for small things. I said, "I went on Denise's. It was great. You know." Well, that's it, you see…you should try things, you know... you don't learn it …(pauses) Yes. As I say, it was interesting. Getting more interesting because I was getting more into it.*

Denise and Lisa later explained that the purchase of identical tablet computers gave them the opportunity to support each other in learning to use the internet. Denise had facilitated Lisa's decision to purchase a tablet computer by making her own tablet available for Lisa to try. That enabled Lisa to build her confidence in her own decision to make the purchase.

Later, Denise commented on the progress she had made and the help she had given to Lisa, as a result of having the same tablet:

> *I've got on to the tablet and I've got on to that really …. I mean, I've used it once a week with Lisa and I've now helped Lisa to use hers because her sisters, you know she's got the same tablet, they've just inundated her with emails... Well Lisa doesn't know how to open them up or anything so they're saying (mimics Lisa's sisters) "Haven't you looked at them yet?" and poor Lisa is getting really stressed.*

Denise was able to provide Lisa with the support she needed, whereas Lisa's own family did not provide appropriate support. Initially, they underestimated her ability to use a digital device and, later, overwhelmed her with emails, before she had acquired the skills to respond to them. Peer support thus worked more successfully, for Lisa, than familial support. Wendy was the only participant to continue without her own computer or tablet. She cited the cost of purchasing the equipment and her fear of technology as her reasons not to obtain a digital device.

Participants with second-hand equipment had realised that the devices they were using were unsuitable for their needs. They drew on supportive relationships with peers, external organisations and family members to build up their self-confidence as computer users. This enabled them to make their own choice of computer and acquire a device which they felt met their requirements. The participants purchased their new digital devices in the early stages of the inquiry and the equipment in their possession, at that stage, was presented in Table 5a and 5b pp. 142-143.

Continuing to build skills and confidence - peer and intergenerational support

Olga and Freda were the first to obtain their own Wi-Fi and both offered to share their Wi-Fi connection with other participants. At Location 1, Freda explained that she sometimes gave other tenants some technical assistance with their computers and initially she invited Kathleen to share her internet connection. At Location 2, Olga initially offered to share her internet connection with Denise and Lisa. Denise remarked that Olga was thought to be the tenant with the most advanced computer skills at Location 2. However, Denise suggested that Olga's skills were, in part,

derived from her access to intergenerational support from her grandchildren:

> *Her (Olga's) family helps her. Olga might have done some more, because her family are up there all the time, and they know how to use them (computers)*

Offering to share their internet connection may have reinforced the other tenants' perception of Freda and Olga as 'experts' within their housing schemes. However, sharing an internet connection between tenants did not work as a long-term arrangement.

Denise commented on an experience with Olga's internet connection:

> *It was labouring a bit up there…. I just used it because we have before. It was a bit slow but I used it because I was next door. (In Lisa's flat)*

While benefitting from Olga's support, Denise later recognised that there are difficulties with a shared internet connection. She commented that Olga's large family may also have been using the connection, while visiting Olga, making the internet connection work slowly when Denise used it. Both Denise, at Location 2, and Kathleen, at Location 1, said they were concerned about sharing the cost of an internet connection with a friend in the housing scheme. Denise and Kathleen both felt that it was difficult to establish how much they had used the internet connection and how to share the financial liabilities. Later, Denise explained how in collaboration with Olga, and with support from Olga's grandson, she established her own Wi-Fi connection. She commented:

> *Olga's grandson has the skills and put the internet on. We got that done between us.*

For Denise, who was fifty six years of age, this was an achievement shared with help from two generations of Olga's family. Olga, who was seventy six years of age, brought Denise and Olga's teenage grandson together to install an internet connection for Denise.

The intergenerational support which Olga facilitated, enabled Denise to benefit from the computing skills of Olga's grandson. Their shared achievement seemed to be a source of some pride for Denise and may have enabled Denise to acquire some new knowledge, on a free of charge basis

and without the formality of joining a course of training. The social aspects of the informal social contact between Denise and Olga's grandson stemmed from and underpinned the offline relationship between Denise and Olga themselves.

Denise recognised the value of the intergenerational support which Olga received and had shared with her. However, later, Denise reported that she had been able to reciprocate the support she had received from Olga and a small support network involving Olga, Denise and Lisa had become established in Location 2. This led them to meet more frequently to provide mutual support, bringing another dimension to their relationship and adding a new element to the structure of their regular weekly activities. Denise developed more advanced emailing skills and demonstrated how to send emails with attachments and to download attachments from emails. This meant she was able to help Olga and Lisa to increase their knowledge of using email. Denise commented on the help she was giving to Lisa:

> *Well I'm definitely using it (the tablet) once a week now because Lisa and I are getting together. I've sorted out hers (Lisa's tablet) as well. That's why I'm quite amazed with it. I'm quite pleased with myself actually. That's what's different really.*

Denise reported that her confidence in her internet skills had increased as a result of their support group activities.

Denise and Lisa met in Lisa's flat to share their computing and internet skills on a regular weekly basis. As they had purchased the same type of device, their regular meetings enabled them to develop new skills together and practice their skills between their meetings. The peer support that they provided for each other created opportunities to exchange knowledge and experience, informally, with practical and emotional assistance. This example demonstrates that in the informal setting of the research location, peer support became available. However, it was provided mainly within existing friendship groups.

At Location 1, the shared internet connection which Freda offered to Kathleen was not offered to Teresa. Kathleen and Freda were friends, whereas Teresa was outside that friendship group. Freda also offered support with computer equipment to Alan, who had recently relocated to Location 1, but this was not offered to Teresa, a longstanding neighbour in

the housing scheme. At Location 2, while Denise, Olga and Lisa shared an internet connection and met to develop their skills, Wendy and Pauline, who were outside their social circle, were not invited.

Health issues affecting the participants' computer and internet use.

All the participants had self-reported health issues which they said presented a challenge to their use of computers and the internet. These health issues were sometimes complex, involving multiple conditions. They are outlined in the Introduction to the Research Participants (Chapter 6, Table 5a and 5b, pp.142-143). The participants frequently reported age-related problems of mobility and dexterity. Sensory losses including the loss of feeling in the hands, poor vision and blindness were also reported. Participants' physical problems included arthritis, epilepsy, cancer, diabetes, respiratory disease and multiple sclerosis. Participants also reported experiencing depression, poor memory and bi-polar disorder. Denise, Freda and Wendy also experienced side effects from their medication. They had all developed strategies to overcome their difficulties and some drew on support from other participants which, they found, could be mutually beneficial.

Overcoming health related barriers to internet use

Lisa reported some embarrassment because her family expected her to progress more quickly with email than her memory lapses would allow. She explained that epilepsy affected her memory and she had difficulty remembering sequences. With help from Denise, Lisa gradually made progress and Denise said she felt she was also learning from the experience:

> *I showed her how to open up a Gmail and reply back to it. A quick way to do it. So she knows how to do it. So it's teaching me, teaching her… So we've now had two sessions. When you're not here we go up to Lisa's on Thursday afternoons and just sit there with the tablet and play around with it.*

Denise remarked that she was in constant pain with tumours in her back. She described the effect of pain and the medication she took for pain relief, on her use of the computer.

> *When you are doing things, you get distracted. Well, pain's distracting as well. You get the edge taken off it. You lose the thread*

with things….It's with being on the morphine. It's frustrating. You can't think as well.

She said that to overcome the distraction of pain and medication she made notes during the computer class and referred back to them:

I haven't got a proper memory problem. I write everything down and I remember it. You know. I've got everything written down. You can tell how I know. I've written down the classes.

Denise reported that although she felt she had learned new skills during the computer sessions, the distraction of pain and medication meant she was unable to remember what she had learned, after the computer group finished. Consequently, she had developed the strategy of making detailed notes during the sessions, to enable her to develop her skills during the computer session and retain her new knowledge after the session finished. Denise commented that the strategy of note taking could assist others in learning and remembering how to use the internet but this approach was not always adopted:

But why [don't] they do it when they've got memory problems? Lisa doesn't write anything down. She didn't know her password. I had to give her her password. I've got her passwords more than Lisa has her passwords. I mean, K (friend) doesn't know his. I've got all K's. It's just crazy. They say they've got memory difficulties but they've not written anything down. If it was me, I'd write everything down so I'd remember it. But no.

Six of the participants, (Lisa, Freda, Denise, Kathleen, Wendy and Pauline) reported problems with movement and dexterity which hindered their use of the keyboard and mouse. Lisa had post-polio syndrome and her left hand closed involuntarily. She spoke about its impact on her use of the computer:

As I say, I've always wanted to (use the computer) but there again, as I say, with one hand, as I say, it's a bit awkward.

Lisa had found that she could type with one hand. She occasionally used shortcuts, which she had learned in the computer group and from her daughters, to minimise the number of keystrokes required to perform an operation. Epilepsy affected her short term memory, making it difficult to remember sequences on the computer. She commented on the effects of epilepsy on her ability to learn:

It's remembering things. I'm not going to say "Oh that's easy" you know. Not for me. I have to concentrate and do things over and over again before it clicks.

She found that frequent repetition helped her to recall sequences and she has remarked that with slow and steady progress she could acquire new skills in computing.

Wendy's bi-polar disorder and her use of the internet

Wendy had involuntary movement (shaking) as a result of long-term medication for bi-polar disorder. She shook almost constantly. When asked her whether this would affect her ability to use the internet for social contact, she commented:

Lack of confidence is part of the anxiety which is with me all the time. Part of it is connected with the shaking which gets worse as the anxiety develops. .

Wendy said that her complex health-related challenges became more acute in unfamiliar situations, such as using a computer. However, she found that, with help, she could use my laptop for social contact. She commented to a friend, in an email later shared with me:

The doctor sees my use of emails as a very positive step because I find it so hard to write (a letter). I really enjoy our communication.

Wendy explained that her health problems also caused her practical and psychological difficulties in writing a letter or card:

'Julie' asked someone I had known from school to send me a card to get in touch. She sent it but I have not replied yet. She doesn't understand why I find it so difficult but the shaking, what the doctor calls involuntary movement, prevents me from writing. The anxiety and possibly the depression robs me of things to say.

Wendy's ability to communicate verbally was also quite limited and she remarked that her friends had difficulty understanding what she said, face to face and on the telephone. She commented that using my laptop reduced her anxiety and the internet provided her with an additional vehicle for maintaining contact with her friends. She added:

Emails are sometimes in response to telephone calls. I ask people to send me an email when they phone on Sunday. 'Ellen' and 'Anne' phone on Sunday. I ask if they are able to send it [an email] for Monday. This week I was better at replying because there were so

> *many [emails] I wanted to do it quickly. One friend, when I said it's hard to work things out to tell her, said that just short things will do for replies.*

Wendy commented that when her friend had suggested that *'just short things'* would be enough as replies, she had found that comment helpful and reassuring. She explained that she liked to use email as it extended the duration of her contact with her friends and was useful when physical symptoms impeded her ability to communicate verbally with them:

> *The Monday email to 'Ellen' is a useful continuation of our Sunday telephone call, especially, like yesterday, when anxiety takes over and I can't talk any more.*

While Wendy's physical and emotional difficulties made most of the usual channels of communication difficult for her, she noted that she was gradually overcoming the side-effects of her medication and her depression, when she composed her replies to emails from her friends:

> *I have found sending emails both useful and interesting. They have enabled me to maintain contact with people and this has been very helpful. I think with practice my technique is improving and the answers don't need so long to compose.*

The interweaving of telephone contact and contact by email enabled Wendy to overcome some of the problems caused by her anxiety which could disrupt her verbal communications with her friends. The combination of telephone calls and an exchange of emails extended Wendy's Sunday telephone contact by adding the email on Monday as an additional opportunity for social interaction.

Kathleen, Teresa and Alan's visual impairments and their use of the internet

Kathleen, Teresa and Alan reported age-related sight losses which had impacted on their ability to communicate over the internet. Kathleen explained that her sight was impaired by cataracts and she adopted several strategies to mitigate the effects of her limited vision. Kathleen's cataracts made it difficult for her to see in bright light. During the computer group sessions, Kathleen drew a blind to shade her computer screen. She enlarged any text she was working with and sometimes relied on the help of a volunteer to read and occasionally to input text when her vision was particularly poor. Kathleen commented:

With my cataracts, I can see more clearly at night. There's not much happening here in an evening so I usually send emails in the evening.

Teresa had difficulty reading text on a computer screen and enlisted help from her tutors and her son to enlarge text on the screen to a size that she could read.

Alan had glaucoma and was blind. Initially, he reported difficulties with most forms of communications technology but he spoke of his hopes to use the internet to re-establish family relationships, which he damaged during the early stages of his illness. Alan explained that he needed a computer with assistive software and commented on the support he was receiving from the Blind Veterans Association:

The way it's working at the minute as I understand it is that I pay the first £400 and then I think the computer is still theirs, sort of part ownership. I'm not sure how it works, whether they want it returned to them eventually when I'm finished with it. If I pay £400 I get this £2000's worth of kit. Something like that. It's brand new so it must be good.

Due to his blindness, Alan also needed to become competent at touch typing. He used an online application to develop his touch typing skills and monitored his progress regularly. Making progress, he commented:

I am still practicing with the Keyboard Tutor (software). I have replied to an email and in future need to practice writing actual words.

Visualising the benefits of communicating online

Alan commented on his need to reach out beyond the social environment at Location1.

In here's it's nice enough, but it's an old people's home. Why, you daren't say anything but that's what it is, an old people's home…. I would rather not be here and they (other tenants) don't understand it." I think, "Well yes, it's great but between talking to you (researcher) and going to bed tonight, that's my day finished now". (11.00am)

Researcher: Well if we can get you going with the internet, do you think that's going to help?

Alan: Yes, because it gives us a different setting, outside, that I've lost sight of. Yes, it does……

Alan felt the social environment of his extra care housing scheme was circumscribed by the needs of fellow tenants who were all considerably older than himself. This is illustrated by his comment *'it's nice enough but it's an old people's home'*. He hoped that by using the internet to access a *'different setting, outside'*, he might find wider opportunities for social and mental engagement. He commented on the benefits he visualised would stem from his internet use:

> *…there's still loads of things to look at on the internet. Educational, interesting… . Oh I could sit for hours once I get the hang of that…. That would be my goal. I wouldn't use it, I don't think I would use it business-wise or writing letters… I would use it for other things, what do they call it, social and media isn't it? …..*
>
> *Researcher: How about in terms of keeping relationships?*
>
> *Alan: Yes, because apart from 'Tom', …my other two sons, one's in New Zealand and the other's down in the South of England. Disappeared. Not off the face of the earth but disappeared from here.*
>
> *Researcher: Do you think the contact could be re-established?*
>
> *Alan: Possibly if I could get online, so to speak. We might get somewhere like that.*

Alan aspired to use the internet for information, entertainment and to re-establish contact with his family. He had few local visitors as he explained:

> *Researcher: Do you have people who come in here to see you? Friends from round about?*
> *Alan: Not really. There's a reason but it doesn't matter. It's to do with the conditions when I got brought in (to hospital)…*
> *Researcher: What do you think of when I mention the internet?*
> *Alan: That I wanted it. I want to do Facebook and emails, that sort of thing, just to keep in contact.*

Alan's comments suggested that something more than physical distance was keeping him apart from his friends in the local area. He explained *"It's a mental thing."* He had become mentally ill when his wife died and he lost his sight. He alienated two of his sons and completely lost contact with them. He also alienated his local friends. Alan hoped that using Facebook and email might enable him to re-establish those relationships.

Lisa also aspired to use the internet for social contact, hoping to overcome some difficulties in her family relationships. She said she felt excluded

when her sisters exchanged messages online and this could cause some friction when they met face-to-face.

> *There's five of us. Me, out of it. Everyone else can use one. (a computer) So they talk to each other, you see. They send messages. And I say, "I am here, you know, I'd like to know."*
>
> *I think that's what annoys me, really. With my sisters when they all get these computers out and I'm sat there, you know and I say to them "Put it away".*

Lisa's lack of computer skills detracted from the quality of her offline relationships with her sisters, as they continued to use their computers and mobile phones when they met, to Lisa's evident annoyance. She anticipated that her sisters would include her in online communications, if she acquired internet skills:

> *Researcher We can set you up an email address. It's free. You can just register.*
> *Lisa: Right. Yes. (Positive, then enthusiastic)…Yes. Oh, that would be ideal. Yes. Because my pride's getting crushed. (Laughs)… I can't wait. Look out! I think it's time I did.*
> *Researcher So do you think they (Lisa's sisters) would keep in touch with you by email?*
> *Lisa: Yes. Oh yes. They'd love to.*

Anticipating closer contact with her sisters, Lisa foresaw that developing her internet skills could improve their offline relationship and also boost her self-esteem. Although she met her sisters regularly, their frequent physical presence was insufficient for Lisa. She wanted the opportunity to share in their exchange of messages between their face-to-face meetings. Lisa envisaged a different type of interaction, frequent sharing of something interesting or what was happening in-the-moment. She explained that this would mean she was participating on an equal basis, when they met, rather than catching up on news the others had already received online. Lisa and Alan both envisaged that communicating over the internet could help them to address specific problems which were manifest in their offline lives.

Age, internet use and sharing some benefits of using the internet

Most participants anticipated that their first experience of online social contact would involve interactions with their family or close friends. Encouragement from her family played a part in Helen's appropriation of

the internet for social contact. She said that, at first, she used the internet to please her family:

> *Yes, my daughter did it... They all did that. They wanted me to get into that frame of mind.*

Helen's family had high expectations and did not consider that her age (ninety eight years) was a barrier to her internet use. Freda, however, commented that her own family had little confidence in the digital skills of older people. She remarked:

> *They think I'm a wizard for my age. My daughter's amazed. She thought I would just use it for Skype and not bother with the rest of it. But I wanted to go into it.*

Freda's family found her digital skills to be exceptional for an individual who had reached the age of eighty-three years. Freda had surprised her daughter because she '*wanted to go into it* 'and explained how she had practised and experimented to learn more computer skills.

She integrated her use of the internet with her offline relationships at Location 1. Freda recounted how her online connection with a Dutch Garden Centre (See Chapter 6 pp. 159-160) enabled her to assist the Facility Manager to purchase Dutch tulips for the garden at Location 1. This added a new dimension to their relationship, since Freda, as a tenant, was providing assistance to the housing scheme manager. Freda commented on another situation where she had used her internet skills, to enhance an offline relationship:

> *Freda: I was doing one [puzzle downloaded from the internet] and she [neighbour in the housing scheme] came in. I gave her some of mine [puzzles]. She was up all night...mm...She was up in the middle of the night doing them. I'm not, I'm not that hooked on them. (laughter)*

Sharing puzzles from the internet added a new dimension to the relationship between Freda and her neighbour and extended Freda's social role in Location 1. Her neighbour's enjoyment of Freda's puzzles, which kept her *'up all night'* indicated the contribution which Freda's internet skills had made to her neighbour's quality of life.

Pauline, a retired college lecturer, also envisaged that internet use had the potential to enhance her quality of life. She had little online contact with her family:

> *I haven't anyone to send emails to. Most of the family have died off.*

However, she anticipated using the internet to enable her to attend educational courses and cultural events where she hoped to meet individuals with similar interests. Pauline was not making contact online with friends or relatives, she was using the internet to create opportunities for future social contact.

Summary

In earlier chapters, a potential role for online social contact was indicated, as a means of addressing loneliness and separation from family and long-term friends, following a transition to extra care housing. In Chapter 7, the participants' journey to becoming internet users has been presented. The challenges they faced and the achievements they experienced, led them to begin to reframe their social and digital worlds. The participants indicated how they addressed the challenge of obtaining access to the internet, their response to some negativity among family members and the measures they took to overcome health issues and age-related limitations. Participants faced some similar and some uniquely individual barriers to online social contact. In this chapter, their experiences of joining the digital world and beginning to communicate online have been recounted.

Chapter 8 Being and relating in a digital world

Introduction.

In the two preceding chapters, the participants' physical and social environment was presented and their journey to becoming internet users was described in detail. The difficulties they faced were explained and the measures they took to overcome barriers to internet use were examined. In Chapter 8, the participants' evolving perceptions of themselves as internet users are explored and the meanings they derive from relating to others, over the internet, are discussed. Participants expressed a connection between their online social contact and their ability to maintain a coherent sense of their personal biography. The link between the participants' experience of continuity, memory, their internet use and their curation of their own life story is then explored. Drawing on the participants' life story, self-presentation online and the online representation of the participants, by others, are then discussed. Participants expressed their wish to maintain their social relationships with family and friends outside their extra care housing scheme. Some participants drew a distinction between these relationships and a different need, to feel in contact with the wider flow of life beyond extra care housing. These separate but related issues are considered in this chapter. Most participants reported that their adoption of online social contact had enhanced their ability to maintain their significant relationships. Their reflections, as internet users, communicating in a digital world, conclude this chapter.

Being in a digital world - the participants' changing perception of themselves

Participants recounted their entry into the digital world of online social contact, as an experience they approached with some caution. Initially most participants indicated that they were doubtful about their digital skills. Kathleen's diary data recorded some early uncertainty:

> *Tried to get emails up tonight but either I am not doing it right or the laptop is no good.*

However, her diary data also illustrated how Kathleen soon developed the ability to use and resolve problems, with the computer:

> *Was getting away well with the laptop and then all of a sudden, it's crashed. Got laptop working again so was able to look at what I had done.*

In contrast with the first comment, this second comment portrays Kathleen's perception of herself as a skilled computer user, with the capacity to resolve an unexpected computer problem and return the device to normal functioning.

Denise also remarked that her computer skills had developed rapidly. She explained that she could troubleshoot issues with the computer and recounted how she resolved a problem on behalf of another tenant.

> *Well it just goes to show how much I've come on. I had no idea how to download a picture because I've never had one on mine. So, I just worked it out. Other things have gone on. You'd be amazed. So, I'm quite, I really have come forward in four months. You don't think about it. You don't realise it's been four months. So, I just downloaded them [pictures] and showed her [Lisa] how to open them up, and bin [save]them, and she was absolutely delighted because she could see these pictures of people she'd never seen.*

Denise had acquired sufficient knowledge of using the internet, to enable her to further extend her skills, through deduction and experimentation, and use her knowledge to support and teach others. She had taught Lisa to use her tablet, to access pictures that she was previously unable to see. Her comments about Lisa's response to this outcome suggests that both individuals experienced pleasure by working through the problem together. Denise's perception of herself had been transformed since she began to communicate online. She understood herself to be a competent internet user and problem solver.

Continuity, memory and the participants' personal biography

Participants commented on the significance of continuity in their familial roles and long-established friendships. Where families were separated by geographic distance, some participants remarked that online social contact facilitated the retention of a strong familial bond. Freda explained that she used Skype to maintain her familial role of mother and grandmother, with

her laptop online from early morning until midnight, *'in case the family needs me'*. She remarked on her daughter's frequent Skype calls from overseas:

> *I like to hear from her. Sometimes she'll Skype me at 11 o'clock at night. She knows I never go to bed before midnight. She's doing a course and will break off when she can and Skype me. We can be on for a long time.*

Freda added that her use of Skype had increased as her spelling difficulties became problematic, making it more difficult to use email as a means of keeping in contact with her family.

Other participants remarked that their opportunities for social contact had become more limited, as their health status declined and their friends assumed caring responsibilities. Helen commented that the cohesion of her long-established friendship group had diminished, as they had all become older:

> *Helen: (Interrupts) Well, I did have a lot of friends, er, a little younger than I, which was a good thing, not much but a little younger and they are still alive. And, of course, they have their own interests and homes and so forth but I was always part of a company of (pause) about five of us going ... going on different things ... for lunches and things like that.*
>
> *Researcher: And are you still doing that?*
>
> *Helen: Not so often. Now my friends are getting older and they have other commitments, ill people that they are looking after, their husbands and so forth… If they have a husband still. So, it's different, now, I can't always participate.*

Helen found that opportunities for face-to-face contact within her circle of friends were decreasing, as a result of changing commitments and priorities. Exploring with Helen, whether online social contact could counteract this change in her relationships with her friends, she commented:

> *No. I don't think that they... we're very old you know.*

Helen perceived older age as a barrier to maintaining her friendships online, although she enjoyed her online interactions with her family (See p.171). In contrast, Kathleen found that using the internet helped her to maintain her social relationships, when changing commitments left little

time for social contact. She explained this in the context of her relationship with a niece, who had become a family carer:

> *Well, face-to-face is just now and again, isn't it? I think because I'm on this [internet], I think "While I'm on I'll just send a message to 'Joan' [niece]. I should have phoned, and I haven't." She lives up in Scotland…her husband, he has a scaffolding company…but he was up a ladder and a board broke…. I'm not sure how far he fell. But his leg was smashed…. So, you know, because she doesn't really have time to phone, or if I ring her, she can't stay on very long, well I send her the funny things [jokes] that my daughter sends me [by email]and 'Joan' sends me some. So, we can keep in touch more than what we would really because she doesn't have the time.*

Using the internet had enabled Kathleen and Joan to maintain the continuity of their long-established relationship, despite Joan's responsibilities as her husband's carer. The nature of their communication had changed. Kathleen had recognised the time constraints associated with Joan's caring role and had identified a different way to keep in contact, by using the internet to share jokes. Kathleen's engagement with the internet, as a means of maintaining contact with her niece, was in contrast with Helen's doubt about using the internet to keep in touch with her friends, highlighting the differences that existed within this group of people.

Participants also spoke of using the internet to rebuild lost connections with people and places from their earlier life. Teresa explained that she had lived in Africa for many years and she used the internet to look again at the places in Africa where she lived, was married and went on honeymoon. She also remarked that the internet provided her with a tenuous link to her friends and family in Africa, with whom she had limited contact since her return to the UK. Commenting on the frequency of her contact with friends in Africa, Teresa remarked:

> *Not very often. I've lost touch with them. (Pause) The few that I've got even. One's over in Zimbabwe and I just can't get in touch with them. I've got a niece in Botswana. She's in touch with me…. Occasionally, 'Geoff' (son) gets in touch with her. On the computer, on the internet, so he gets some bits of news from her.*

Using the internet, Teresa tentatively re-entered the personal world of her own biography, digitally re-visiting meaningful geographical locations

which were beyond the reach of her physical self. Internet use also facilitated Teresa's social contact with some relatives in geographically distant locations and enabled her to share in her son's online communications with members of her family.

Olga was also aware that the internet could provide a link with one's personal history and explained how her son used Facebook to reconnect with friends from his school days:

> *Our 'Daniel' said he'd only been on it (Facebook) two nights and the second night he went on it he said he had loads and loads of mates from school, old school friends, saying "Is that the 'Daniel Smith' that went to the local school?" You know this sort of thing, so he said "Ee, it was lovely catching up with them" ... He said, "We had a real good chin wag, you know."*

Olga understood her son's enjoyment of his interactions on Facebook and the opportunity it presented to re-establish social connections, based on a shared personal history. She commented that her son had been encouraged by relatives to join Facebook:

> *He went on [Facebook] reluctantly but now he's an avid [user]*

Olga added that she and her son had spoken about the importance of being able to choose, whether or not to maintain these lapsed relationships, rekindled through contact on Facebook. She added:

> *You don't <u>have to</u> keep in touch with them.*

Wendy also recounted how internet use had enabled her to reconnect with friends from her time at school and university. She had shared her email address with an old friend, who put her in contact, by email, with other friends with whom she had lost touch:

> *(Email) enabled me to contact people that I could not have found by any other means...*

Rekindling these dormant relationships, Wendy explained, led in some cases to offline contact (letters, cards and telephone calls) and face-to-face meetings. She commented on the continuity of other long-term friendships, latterly maintained online. One particularly significant relationship had lasted for nearly sixty years.

For these participants, online social contact was more than an opportunity for social interaction, 'in the moment'. It affirmed their sense of self, by providing an opportunity to revisit old friendships, places and events from their earlier lives. It enabled them to reclaim some elements of their personal biography which would otherwise have been inaccessible to their present-day selves.

Reclaiming, being and moving on

Participants remarked that age-related physical changes, coupled with a transition to extra care housing, had to some extent, impacted on their sense of self. Wendy explained that the happiest time of her life was as a research student at a local university. She expressed regret for the loss of the person she was at that time and the skills that enabled her to study.

> *Researcher's Diary (16.6.14) Wendy said, "I have a very poor quality of life and sometimes I have not felt like a person at all." She went on to say that "She was unable to concentrate."*

Wendy felt that her former, more able 'self', had been replaced by a diminished 'self' to the extent that she barely recognised herself as an individual. Wendy attributed this diminution to the effects of her long-term health conditions:

> *Speech difficulty, anxiety and depression. Makes life very hard. Also, memory and concentration very poor, adds to the anxiety.*

These difficulties had changed her perception of herself:

> *"I am not the person I used to be." (Comment by Wendy, noted in my Research Diary, 21.7.14)*

When Wendy attended the computer class, she brought a list of former contacts and familiar places which she hoped to find on the internet. Asked how she decided what to look for on the internet she replied:

> *I look for things that I am really interested in and greatly miss, that I feel I might never see again. Kind of painful nostalgia.*

Her first internet searches reconnected her with her time as a research student, focussing on her former tutors and her research subject. She explained that she wanted to know whether her tutors were still alive and how their careers had developed. She said that she did not want to make

direct contact with them but she explained that a tenuous connection still existed with one former tutor:

> *Researcher's Diary extract (22.9.14) Wendy again brought the names of people she has known, to look up on the internet. Tutors from when she was at a local University. The tutor she researched today is now an Emeritus Professor at the university.*

Regret for the loss of contact with her former tutor resonated as Wendy articulated an incident whereby an opportunity to maintain contact had been lost:

> *He [Emeritus Professor] sent me a Christmas card last year but I did not have his address and could not send one back.*

Wendy was using the internet to complete her knowledge of how the careers of her tutors had unfolded, temporally in parallel, but separately, from her own. Her internet searches enabled her to re-engage with the period of her life spent at university. Several weeks later Wendy commented during one such internet search:

> *I feel more like I used to be.*

Using the internet to recapture the enjoyable times in her personal biography, had helped Wendy to feel, if only for a moment, that she had regained a sense of who she was.

Alan also remarked on the loss of his former self and his familial role, following the onset of his blindness and his transition to extra care housing:

> *There are situations when, sometimes I look around and think, "How did I get here? Not so long ago I ran a house with three boys and a van. A dog." The dog died the year before I came in here. Just as well because I don't know what I would do with it. The car you know, my son sold the car, and maybes I'm in a dream…*

However, his diary data revealed his efforts, with the use of the internet, to reconstruct his familial world and establish a wider social world to suit his changed circumstances:

> *This week I invited 'John' [brother] to join my contact list on Skype…Last Tuesday I joined the Skype Group at [the local group for blind people.]*

Shortly afterwards, Alan reported having established regular online contact with his brother adding:

> *I am emailing my sister-in-law in Australia. Now that others have joined in, we'll have a chat room going before long! I still Skype 'Paul' [at the local group for blind people] each week and am looking for more people to Skype.*

Alan had used the internet to re-establish family contact and was actively building a network of online contacts with whom he could engage socially. He noted the success of these activities:

> *I have emailed many people and continue to receive emails every day.*

He remarked that he had also started to acquire digital devices for other applications, to enhance his household management skills:

> *This week we continued with shopping for kitchen gadgets. There is a lot to learn. This will be my priority from now on…I'm now a dab hand at poaching eggs with my new poacher. I'm thinking about making a casserole, but I need to have the equipment.*

He subsequently added:

> *Next week I intend to start using my slow cooker. We had to choose one with simple controls rather than touch screen, so I can use it.*

Alan also recounted that he had purchased digital equipment enabling him to make hot drinks. He commented:

> *While [a visitor] was here I made a cup of coffee using my gadget to put the correct milk in and my kettle. I think she drank it all.*

His adoption of technology for online social contact, led Alan to employ digital devices, for applications which enhanced his independence in the domestic sphere and enabled him to provide hospitality for others. Although Alan's circumstances had changed entirely, from his earlier life in the community, he also began to use wearable technology, to manage and navigate his domestic space, reclaiming some of his former skills and applying them in a manner appropriate to his new situation, thereby enhancing his life as an extra care tenant.

Participants' self-presentation in online communications and their representation online by others

Participants' self-presentation online was mediated through their creation of unique online usernames and in the textual, visual and audio content of their communications. Most participants stated that they had initially chosen to represent themselves online using an email address or Skype name derived from their own name, sometimes combined with personally meaningful numbers. Kathleen revealed that she chose to add her flat number to her own name to create a username for her email account, while Alan used his name and date of birth as his username. Wendy and Teresa used their full names as a single word to establish their email addresses. Freda, however, explained that she had chosen to use her first name, prefixed with 'Techno.' as her Skype username. She argued that it expressed her identity, adding that her computer was central to who she was and how she wished to be known by others.

Wendy remarked that, initially, she found sending emails to be challenging. She spoke of being fearful of presenting herself inappropriately and added, *'depression and anxiety robs me of things to say'*. She asked for reassurance. Research diary extract:

> *Wendy was anxious about sending an email to [friend] today. She asked, "What shall I say?" and later "Is it sufficiently interesting?" She seems to evaluate, comment on and respond to the self-presentation of her correspondents and sometimes mirrors their style. "I'll use [friend's] word 'lovely'." Another time Wendy commented on a short email from a friend, who had ended the message abruptly, with just her name. Wendy pointed this out, and said, "I'll send love", concluding her reply with more affection than her friend had shown her.*

Wendy's comments indicated that she felt her emails to her friends presented them with an image of her 'self' and the life she was living, in addition to their textual content. She lacked confidence in her ability to project a suitable image of herself, without support. Wendy also commented that she valued the continuity of her long-term friendships and she expressed this in her emails: *I really enjoy your weekly emails with news from [overseas location]* and she used her emails to remind her

friends to make contact again, often closing her message with the words '*…until next week'.*

Alan commented that he liked to represent himself online, with photographs of the events and activities in which he had taken part. He stated:

> *I received photos of my rowing trip by email and I forwarded these to my friends.*

He explained that being unable to select a preferred image of an event, he generally forwarded all the photographs he received from friends and associates, unless a friend was on-hand to guide his choice. He stated that the photographs were proof of his participation, adding:

> *Although I can't see them myself, I hope other people will be interested.*

He shared many images of his rowing group, commenting:

> *To the point of being boring, did I tell you about the time I was rowing at 'a local' Uni? As we say, it was pretty cool, you would have enjoyed it I am sure! It was all very pro. and could lead to bigger things when we eventually get onto the river!*

Alan used email to present himself and his activities to his social contacts; in the example above, associating himself with a higher education establishment, modernity and sporting challenges. His emails represented his life, as he experienced and chose to portray it. As an older individual with total sight loss, Alan shared images which indicated that he was fit and active. This was how he wished to be known.

Olga recounted how her sense of self was impacted, when her daughter represented her online, as an individual with serious health concerns. She indicated that her daughter had not obtained her consent to portray her in this way. Olga explained how the breach of her privacy occurred, on Facebook, and she remarked on her response to the intrusion:

> *Olga: My lovely daughter put something on Facebook the other day and I was furious about it when I found out.*
>
> *Researcher: Did it involve you?*
>
> *Olga: Yes…She …(pause)…she thought she was in a "safe room" ...with a friend. And they were talking about their*

parents and whatnot and [Olga's daughter] said "You didn't know, did you, my Mam's got cancer?" Well, A, it had not been confirmed, and, B, hardly any of my family, only my immediate family knew. I hadn't told my friends or anything yet. …. and of course, within half an hour of it going on, I had phone calls. Our D [son] phoned me up and he said "Mother, do you know you're on Facebook?" I said "What?" Well of course, [daughter] swore blind "No, no," it wasn't her, she said.
So, you could say it was all over the internet before...
So, I wasn't happy about that.

Although the online representation of Olga, as an individual living with cancer, was factually correct, Olga experienced the disclosure as inappropriately timed and upsetting. Her experience illustrates the complexity of online information sharing, as the automatic notification of others, in some online groupings, makes it difficult to be sure when information is being shared privately or to control the circulation of information once it has been disclosed. Olga's experience of her daughter's release of sensitive information, illustrates that the skills involved in the safe disclosure of personal information, can be lacking in some younger individuals, although they are often stereotyped as more 'tech-savvy' than their elders.

Reflecting on the disclosure, Olga commented that she felt Facebook was *'a little too intimate'* but the loss of privacy had not diminished her enjoyment of most family interactions on the social media platform. She remarked:

But, like I say, apart from that, I think it's brilliant. I think you can keep in touch. It keeps you in touch with people erm that you went to school with, you know.

Participants' network of online and offline relationships

For most participants, online social relationships were a continuation of existing offline relationships, including family members, long-term friends and associates. Kathleen explained her position within a complex network of family and friends who used email to circulate jokes:

Yes [I send jokes]. When, I get them. 'Caroline' [daughter] she sends me them and er 'Sharon', [my niece], and 'Ben' [friend] sent the church ones. Did you get the church ones? He sent

me that one, other ones I get from 'Anne' not so many, she must leave it to 'Sharon' that sends them. And 'David' and 'Gloria', [son in law and daughter] when she gets them, she sends them, and I think they're good. And I think they are nice to pass on. (With emphasis)

You know, yes, cos I'll say to 'Gemma', [niece] you know, you should do it, because 'Johnny' [her husband] has the computer, you know. I know she's thinking I will, but…now I send them to my friend, 'Gwen'. She doesn't think they're funny. And I say, "You have no sense of humour…whatsoever."

Kathleen's network of online contacts was based on her pre-existing offline relationships, which she had also transferred to an online status. Olga's network of Facebook Friends was less familiar to her. She commented that her family had encouraged her use of Facebook and established her presence on the social media site:

You know, I'm on it because the girls (Olga's granddaughters) put me on it.... and I've got more Friends than Soft Mick. A minute, two, five minutes of going on it our 'Rose' (Granddaughter) said "I don't believe this Nana, you've got 300 Friends here." "Oh thanks very much" I said, "I don't know them".

"No, you don't have to know them".

But I said "What is the point, then? No one's your friend if you don't know them." That's the bit I don't understand. I don't know …pause…. just me being thick…

Olga explained that the virtual 'self' of her Facebook account was the creation of her grandchildren and she felt the social contacts which the Facebook account generated were inappropriate for her. She added:

I would like to get into these Chat Rooms. I don't know if it's Chat Rooms. I'd like to meet up with people that I know. A lot of them I do know. A lot of them go to our church.

Olga realised that the internet could offer new opportunities for social interaction, but rather than the new 'Friends' of her Facebook account, she would have preferred an online presence that extended her interactions with existing friends and associates within her local community. Olga's experience indicated a difference between her needs and expectations of online social contact and those of her granddaughters. Olga was surprised to discover that the concept of 'Friend' did not indicate a lasting bond of mutual affection, in the context of her granddaughters' use of social media.

Reaching out to the wider world

While Olga had expressed her wish to use a Chat Room to contact known individuals in her local community, Teresa, Alan and Pauline voiced a more general hope that internet use would put them in touch with the world outside their extra care housing scheme. They indicated a feeling that their world had shrunk to encompass only the housing scheme and become separate from the life of the wider community. Alan and Wendy equated this with a feeling of imprisonment, with Alan remarking that he signed some family emails as *'The Prisoner in Cell Block H'*. Teresa commented that online social contact would enable her to *'keep in touch with the world'*. Similarly, Pauline commented that her online activities enabled her to '*feel part of the modern world'*. Alan had initially, reported feelings of unreality and despair, when he considered his circumstances as an extra care tenant. He asked:

> *Where's everything gone? It's surreal, really.*

He explained that he wanted to use the internet:

> *because it gives us a different setting, outside, that I've lost sight of.*

The connection he referred to was not with an individual, but with the essence of life in the wider community which he felt was beyond his reach.

Freda commented on her different experience of using the internet for social contact, which was less a reaching out to the world and, instead, enabling the outside world, to use the internet, to enter her living room:

> *In the evening, about teatime, (daughter) gave me a Skype call. I like to hear from her…She had the girls with her. I like to see them.*

Freda's sense of close familial connection was made possible by a Skype call, bringing her daughter and granddaughters' 'presence' into her domestic space and Freda's 'presence' into their home overseas. Freda could both see and hear her family, making their online connection more complete.

Olga remarked on her plan to re-instate Skype on her laptop, to maintain contact with her daughter and grandchildren in Australia:

> *'If we got this Skype …Skype, like we did before', I said, 'Where we were all talking', in a way it was a waste of time because you've got a family there and you've got three families here, looking over everybody's shoulder trying to get in on the …you can imagine, it was pure Bedlam. But I said 'We three could have a three way or even a four way, I think you can do, and all, well the girls, get together that way to chat, even if it's only once every couple of months'… Yes. Oh, it keeps you alive.*

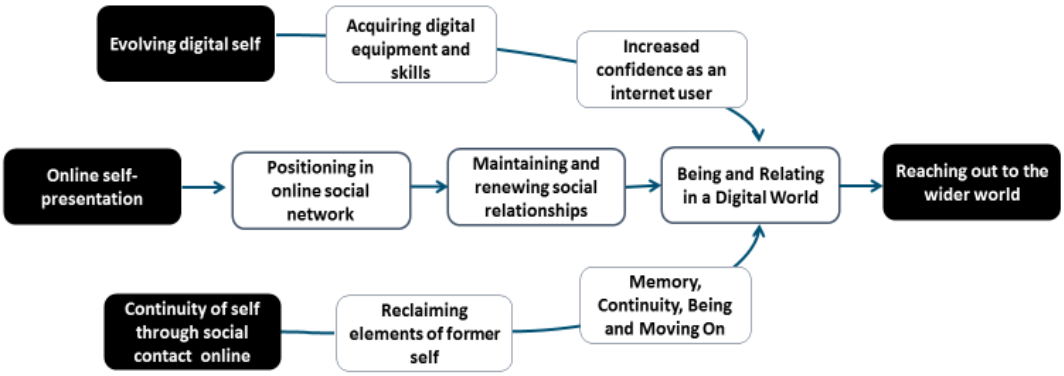
Olga recalled earlier conversations over Skype between her family in north east England and her daughter's family in Australia. Though lively, their discussions were also chaotic, due to the large number of individuals jostling for position and to be heard. Olga proposed developing an approach whereby a small sub-group, comprising 'the girls', could chat, more privately together, on a regular basis. Thus Olga was finding a way to adapt her family's use of Skype to meet her own needs and those of her daughters.

The evolving digital self

The participants recounted how their uptake of online social contact led to changes in their sense of themselves and the boundaries of their worlds. They reported finding that their internet skills evolved over time and with experience. This enabled them to solve problems, learn through experimentation and grow in self-confidence. Successfully establishing the preconditions for online social contact led participants to report feelings of increased autonomy. They installed the infrastructure for internet use and overcame physical and sensory barriers to using a computer. Participants explained that they enjoyed their online communications, which provided continuity in their familial and friendship bonds. Some participants also expressed pleasure in reconnecting online with significant people, places and events from earlier stages in their personal biography. Online self-presentation also became significant to some participants, who curated their visual and textual representation online, being aware of the perceptions of their social circle. The interconnections between these elements of the participants' developing digital selves are illustrated in Figure 2 below.

Figure 2 illustrates three linked strands of the participants' experience which emerged from the findings of this inquiry. The upper line indicates the preconditions for the participants' engagement with the digital world, acquiring digital equipment, skills and increased self-confidence. The centre line reflects the participants' perceptions of settling into the digital world, establishing an online presence and engaging with others online. The lower line indicates the participants' use of online social contact, to maintain the continuity of their personal biography.

Figure 2 - Extra Care Tenants - Being and relating in a digital world



These elements combined as the participants' use of online social contact enabled them to reframe their social connections, push back boundaries and engage, as digital beings, with the wider world. The implications of their experience are considered in Chapter 9, Discussion.

Chapter 9 - Discussion

Introduction

The findings, presented in Chapters 6, 7 and 8, are discussed in Chapter 9 and their implications for policy and practice are considered. The discussion explores the participants' perceptions of their world of online social contact (presented in the previous findings chapters) and how this can be understood in the context of theories of ageing, communications, human-computer-interaction, self-development and adult learning. The research and policy literature is also considered in discussing these findings. The inquiry developed from my interest in older individuals' experience of online social contact and responds to a call from researchers (Matthews & Nazroo, 2015; Damant & Knapp, 2015; Khosravi *et al.*, 2016; Hunsaker & Hargittai, 2018) for a more nuanced understanding of older adults' use of the internet. The participants overcame many barriers in adopting social internet use and the findings raise issues of policy and practice in relation to older individuals' internet access and their acquisition of digital skills.

Extra care tenants' internet access

Statistics are not available for the provision of internet access in extra care housing schemes (Housing LIN, 2018) and consequently, the extent of extra care tenants' internet use remains unclear. However, at the commencement of this inquiry, the two research locations made no provision for tenants' internet access. Damant and Knapp (2015) contend that care recipients' internet connectivity is a low priority for the housing sector, as among registered care homes, in the UK, '*only about twenty five percent provide internet access for residents' (p.6).* This suggests that housing providers may perceive internet connectivity to be of limited interest to older residents. However, the findings of this inquiry indicate the contrary to be true for the participants. Their determination to communicate online, despite setbacks and difficulties (pp.148-153,

pp.163-168, pp.170-172) indicates a degree of agency and self-efficacy, not always associated with older adults living in supported housing schemes. The aspiration of older adults to become internet users, is under-represented in the literature, and this inquiry has illuminated the deliberations, decisions and experiences of a small number of individuals living in supported housing, as they prepared to communicate online.

Developments in digital telecare systems may hasten the wider availability of internet access in older adults' supported housing. Some suppliers are already offering tenants' internet access within packages of digitalised management services (Blackwood Homes and Care, 2019; Rochdale Boroughwide Housing/Tunstall Healthcare, 2018). The introduction of digital telecare systems coincides with a switchover of UK telecommunications infrastructure, from analogue to digital connectivity, in 2025. Consequently, investment in digital management systems could be timely, making extra care tenants' internet access more widely available, in coming years.

Digital inclusion - public policy

Digital inclusion has long been an objective of UK public policy and in the early 2000s, a major policy focus was the social and digital inclusion of potentially marginalised groups, including older adults (DWP, 2005; ODPM, 2005; ODPM, 2005[2]). More recently, however, reduced public funding has limited the availability of ICT training for adults outside the workforce. In 2020, while digital inclusion continues to be a goal of public policy (UK Digital Strategy 2017) four million adults in the UK have never used the internet and this figure includes two and a half million adults, aged seventy five years and older (ONS, 2019). A contradiction is evident, since wider digital inclusion is required to meet the objectives of the UK Digital Strategy 2017, while public funding for internet training has been greatly limited.

Older individuals responding to earlier provision of publicly funded ICT training, anticipated '*enjoyment', 'health benefits', 'social interaction'* and *'greater self-confidence'* (pp. 17-18). They saw a connection, which can

also be found in the literature, (Age UK, 2015a; 2015b; Digital Unite, 2013) between health, social relationships, ICT training and internet use. While ICT training is not readily available in the community, it is more8rarely found in older adults' specialist housing. The Get Digital Programme of 2010-2011 demonstrated the demand for ICT skills training in older adults' housing schemes (pp.15-16). However, the follow-up to Get Digital has been patchy. Gray & Worlledge (2018) found that ICT training was provided on only two of thirty two extra care estates studied. Since digital skills can contribute to older adults' social connection, health and wellbeing, as indicated in this study's findings, it would seem appropriate to increase public funding for older adults' ICT skills training. The findings of this inquiry indicated that the participants experienced social internet use, as enhancing, rekindling and bringing about new social connections (pp.192-199) which Victor & Bowling (2012) argued enhanced the quality of later life.

Digital inclusion – participants' perspective

While the concept of digital inclusion is understood from a public policy perspective, as being associated with skills, health, income and social connection (Helsper, 2008) a more personal meaning of digital inclusion, was articulated by this study's participants. Initially, some participants voiced feelings of *'being out of it'* when their lack of digital skills created a barrier to social interaction with their relatives and friends. Digital inclusion, for these participants, indicated an experience of movement and change, enabling them to interact socially online. Thus for the participants, digital inclusion enabled their digital self, to join the digital presences of their family and friends, online. Digital inclusion was therefore associated with social inclusion, since online social contact provided an avenue for the participants to experience feelings of belonging, support and being needed by others (p.150, pp.160-161). Thus, the participants' digital self could also support their traditional familial roles and social relationships, enabling them to remain, 'digitally included' in social and family life (pp.185-186, pp.196-197).

While participants envisaged emotional closeness, as an outcome of social internet use, some participants also voiced an aspiration to feel digitally included, as *'part of the modern world'* (p.204). This was not a connection with individuals, but with the essence of life in the community, '*because it gives us a different setting, outside, that I've lost sight of' (pp.187-188).* The participants, as extra care tenants, were neither independent agents in the community, nor entirely dependent on their housing provider. They envisaged that online communication could enhance their 'being-in-the-world', as extra care tenants, by equipping them with 'modern' skills and competencies, with a currency in the wider community. The participants' found their ICT skills had an application beyond their housing scheme, while, at the same time, their presence online brought their family, friends and the community closer (pp.194-199).

Complexity of social internet use

Online social contact has been promoted to older adults, as *'great fun and easy when you know how'* (BBC, 2011). However, for some participants, the reality of online social contact was more complex. The prerequisites for online social contact include skills and competencies which are 'taken for granted' in the wider population but are absent from the skillset of the novice internet user (pp. 170-171, pp.184-185). The processes and practicalities of older adults' acquisition of digital skills are outlined in the literature (Niace, 2012; Dickinson, *et al,* 2005; 2007; Turner *et al.,* 2007). However, the participants' reality of social internet use has been less widely studied. This inquiry extends understanding, by voicing the participants' feelings and conflictions (pp.170-171, pp.179-180, pp.183-184, pp.185-186) as they drew on their personal resources and external support, to enter the world of social internet use. Their self-perceptions, as internet users, developed temporally (pp.186-187) and with growing skills and confidence, their patterns of internet use evolved, as they moved between online and offline communications, to meet the needs of the moment.

Nowland *et al.,* (2018), noting that online and offline social interactions can be intertwined, suggested that further exploration was merited. The findings of this inquiry indicate that participants frequently adopted a

combination of online and offline social contact, in response to changing circumstances (pp.185-186). Genres of online social contact were also changed, in response to age-related losses. Thus, email was replaced by Skype, to overcome spelling difficulties (p.194) while email replaced the landline, for a participant with articulatory problems (p.187). Similarly, when face-to-face contact was occasional, participants combined online and offline interactions, extending contact time and filling the gaps between face-to-face meetings, albeit with a changed social presence (pp.188-189, pp.194-196). This indicates a personalisation of the participants' social internet use which is not reported in the current literature.

Continuity and housing transitions

The findings of this study have indicated that discontinuity of place, housing and health status could accompany the participants' housing transitions, disrupting the continuity of their social relationships and thus the coherence of their personal biography. However, adopting strategies to maintain the integrity of their essential being, enabled participants to experience continuity, despite external change. Participants found that the internet was a resource they could utilise, to maintain the continuity of their social relationships, when a housing transition created disjuncture in their offline world. Thus, by supporting their relationships, online social contact also supported continuity in the participants' sense of self.

In his continuity theory of normal ageing, Atchley (1989; 2006), advises that continuity is older adults' preferred strategy, to maintain their wellbeing in later years. He posits that when age-related losses lead older adults to relocate to a supported living environment, there is a high potential for discontinuity of personal biography and personal relationships, following the transition. He contends that the status of retirement housing dwellers is 'anomalous', as they are neither ageing 'normally', nor 'pathologically' making their situation, in terms of continuity, unclear. Atchley (1989) notes, however, that while the 'external structure' of an older adult's physical and social environment may change, the individual's 'internal structure' of character, attitudes, affections and skills can remain intact. The findings of this inquiry extend

understanding of the status of retirement housing dwellers, to indicate that for these older participants, continuity could be maintained, as they used the internet to retain their social relationships, following the disjuncture of their housing transition.

Participants' agentic management of their resources

While the participants' self-development as internet users was non-linear, the installation of an internet connection was the first stage in their progression to becoming agentic digital beings. To establish internet access, participants mobilised their material resources to obtain the necessary equipment and their social resources, for advice, practical help and emotional support (pp.149-150, pp.155-156). With their internet connection secured, participants then had ongoing access to additional resources, online. Their experience can be considered in conjunction with the Arber & Ginn (1991) model of the resource triangle, whereby older adults progressively mobilise their material, caring and health resources (the three points of the resource triangle) to respond to age-related challenges.

The work of Arber & Ginn (1991) predates the ubiquity of the internet and in the early 1990s, opportunities for older adults to augment their resources online, were unknown. However, within the framework of the Arber & Ginn (1991) model, the internet can be considered as an additional resource for older adults, particularly in the context of the emergence of the Internet of Things. The findings of this study indicate that the participants used the internet to unlock new social, emotional and material resources, renew friendships, join new social groupings and make more frequent contact within existing social networks (pp.200-205). Participants also made online purchases, identifying goods and services, otherwise unavailable to them, extending their reach into the wider world. When the participants' own needs had been satisfied, some made their digital skills and equipment available to others, enabling their neighbours to establish an online presence and to access online resources for their own use. This positively changed their day-to-day contact with others in a situation where their social contact was otherwise reducing. The Arber & Ginn

(1991) model of the progressive mobilisation of resources, to meet changing needs, can therefore be extended and applied to the situation of older individuals living in extra care housing in the internet age. A search of existing literature suggests that this might be a topic for future research.

The application of the findings from this study can be illustrated by a blind participant's progressive mobilisation of his resources, which led, in due course, to the transformation of his quality of life. Mobilising his offline social resources, the participant learned to engage with the internet, enhancing his social connections and obtaining material goods. Increased confidence led to his acquisition of additional digital devices, including wearable technology for individuals with sight loss. Wearable technology was significant in supporting the development of this participant's social relationships as it enabled him to navigate his immediate surroundings and access the adjacent outdoor space. This brought him more frequently into contact with fellow tenants, using the communal areas of the housing scheme. The participant became an advocate for wearable technology, sharing his experience with members of the local Blind Club. His use of wearable technology then became a talking point, creating more opportunities for engagement with his peers. The participant continued to purchase digital devices, establishing a cycle of progression towards greater self-reliance and social connection.

The authors of the Arber & Ginn model could not foresee current developments in ICT, but their model can be used to consider progressive change as an element in the understanding of resilience and coping in later life. In the case of the blind participant, his experience of daily life was changed through the introduction of digital devices, to address the practical difficulties he encountered every day. An awareness of the potential of digital devices, to improve older individuals' quality of life, is helpful to those working with older adults. Some older people, themselves, will also adopt digital devices using them to enhance their experience of everyday living.

Reclaiming the self

When frailty, chronic ill-health or sensory impairments denied the participants the positive self-images of their earlier years (p.198), some recounted experiencing a loss of their sense of self. Charmaz (1983) highlights the suffering associated with chronic conditions and advises that for an individual to move forward, from a loss of self, the old self must be superseded by an *'equally valued'* new self. This study can add that participants found their acquisition of internet skills contributed to new positive self-images which enabled their sense of self to be reframed. Participants' digital skills and social internet use became attributes of a new digital self' and a source of pride, achievement and renewed ambition (p.193). This finding offers an extension to Charmaz's (1983) findings by signposting a route whereby individuals were able to establish a valued new self and restore their feelings of self-worth.

While recognising the value of the new digital self, participants also mobilised the new self, to reclaim some attributes of the old 'self'. Establishing an online presence, they renewed old friendships, revived memories and regained old skills, integrating them with their new digital 'self'. Thus, the participants could turn their attention away from the loss of their former selves, to move forward as digital beings, using technology to reconnect their past with their present.

Participants' self-presentation online

Extra care tenants' self-presentation online has commanded little attention from researchers, although a substantial body of literature (Pang, 2018; McConnell, *et al.*, 2018; Burke & Kraut, 2016; Boyd, 2015; Mubarak & Mubarak, 2015; Davies, 2012; Bazarova *et al.*, 2012; Utz, 2000) addresses the online identities of younger internet users. The disparity in research interest suggests that little is known of extra care tenants' self-portrayal online and thus, the complexity of their online identities, may be underestimated. However, the findings of this inquiry indicate that for some participants, self-presentation online involved carefully crafted text and visual imagery. Participants' attention to their online identity suggests that some participants adopted a strategic approach to engaging and retaining their audience, not unlike the approach of younger internet users.

It has been argued that identity is a social construction created for audiences including the self, the individual's social circle and the wider world (Charmaz, 1983; Erikson, 1968; Goffman, 1959.) The findings indicate that, similarly to younger internet users, the participants' self-representation online was complex, considered and purposeful, providing a curated insight into their online and offline worlds. Stanculescu (2011), referring to a sample with no age reference, suggests that self-presentation online is rarely spontaneous and social profiles can be overly curated. The findings of this study show that the participants' interest in online self-representation, included an awareness of audience, context and their own vulnerability. The findings also indicate that some older people may require support in developing their on-line identities.

Placing one's curated identity or self-representation before an online audience, has inherent risks, since the audience cannot be defined, the response is uncertain and the self-representation, once launched, cannot be readily withdrawn. A participant referenced an inappropriate family posting and the negative consequences of its circulation through familial and friendship networks; an experience that did not diminish the participant's loyalty to the social media site, which she valued for its capacity to support familial connections (pp.201-202).

Biography and disengagement

While largely situated in the moment, the in-built chronology of users' social media posts, can provide a mechanism for revisiting the past, through the retrieval of historical postings. However, the findings of this inquiry indicated that the participants adopted a number of approaches to reconnecting online with their biography. One participant voiced feelings of *'painful nostalgia'*, as she searched, online, for individuals who were once within her social network. Her experience resonates with Cumming & Henry's (1961) disengagement theory, whereby older adults withdraw from their social relationships in preparation for death. Conducting internet searches to *'update her memories'* and *'draw together the threads'* of her life, the participant made no contact with the individuals whom she

'*greatly missed'*. She stated that the process of *'looking'* afforded her some satisfaction.

While the participant's experience has a resonance with the gratifications of surveillance and substitute companionship, (Katz *et al.,* 1973) the participant's expression of loss may have more resonance with Cumming & Henry's (1961) disengagement theory. These authors posit that older adults' withdrawal from society is mutually beneficial, releasing the individual from social obligations, while society prepares for their loss. The participant's comments indicate a deeper emotional experience than the gratifications of surveillance or substitute companionship. This participant articulates an intense sadness, which may suggest a lived-experience of disengagement.

Most participants engaged in reminiscence, drawing on emails and visual images, to elicit a sense of self and personal biography. Davalos *et al.,* (2015) considered the experience of nostalgia among Facebook users and recognised the *'bittersweet'* feelings elicited from reviewing earlier posts. Davalos *et al.,* (2015) contended that nostalgic reflections were primarily positive but may contain *'a little sadness and longing'* suggesting the experience lacked the intensity of that of the participant referenced above. While most participants, in this study, reviewed their online correspondence for some nostalgic reflection, they also noted their progress as internet users.

Self-development and Fundamental Human Needs

Carstensen *et al.,* (1999) suggest that older adults may lose interest in self-development and learning, when they perceive their remaining lifespan to be short. Carstensen's socioemotional selectivity theory proposes that as time appears to be 'running out' the social goals prioritised by older adults are those providing emotionally meaningful experiences rather than intellectual goals. This proposition is of interest in terms of older individuals learning to communicate online, since the uptake of digital skills may be construed to be a long term endeavour, whereas the successful acquisition of digital skills can lead to emotionally significant

experiences, 'in the moment'. While the extra care dwelling participants chose to invest time and financial resources in developing their digital skills, and anticipated an emotional return, the majority of their neighbours in both research locations declined the opportunity. This suggests that Carstensen's socioemotional selectivity theory may have been applicable to their neighbours, while the participants responded differently, continuing to feel a drive for self-development, in addition to their need for emotional satisfaction.

Social integration

Two participants, one at each extra care location, initially found their needs for social connection were unmet, within the housing scheme. They experienced their social environment as unsympathetic, likening their life as an extra care tenant to imprisonment (p.205). Opportunities for social engagement within Locations 1 and 2 were accessed and experienced differently, by participants. The extent to which participants made social connections within this environment was dependent on the appropriateness of the social offering and the individual's character, social orientation and circumstances. Individual relationship preferences, external social support, age-related impairments, depression and anxiety also influenced participants' social connections with other tenants. Berkman *et al.,* (2000) cite Durkheim (1897) to indicate that the lack of social integration can lead to loneliness, isolation, poorer health and a lesser quality of life. However, for the two participants referenced above, limited contact with other tenants prompted their self-development and their adoption of social internet use. For one of these participants, social internet use led to a more positive outlook and improved relationships within the housing scheme. The works of Maslow, (1943; 1968) and Max-Neef, Elizalde and Hopenhayn, (1991) provide insight into participants' continuing self-development.

Maslow's hierarchy of human needs

Through his hierarchy of human needs, Maslow (1943; 1968) contends that the satisfaction of needs is sequential. Physical, social and self-

developmental needs are met through a hierarchical progression towards self-actualisation. Extra care housing provided for the participants' lower level needs for food, shelter, physical security and social interaction. However, to progress to higher level needs for intimacy, affection, esteem and self-realisation required interaction within an individual's familial and friendship networks and wider society. This necessitated the participant extending their reach beyond the extra care housing scheme, to progress towards self-development.

To consider the participants' progression towards meeting higher level needs, I brought together Maslow's hierarchy of needs and the theoretical frameworks of Atchley's (1989) Continuity Theory of Normal Ageing and Katz *et al.,* (1973) Uses and Gratifications Research. Maslow suggests that progression towards self-development involves intimacy, affection and esteem. Katz *et al.,* suggest that media uses and gratifications include social relationships, group membership and a sense of belonging. This indicates that media uses, such as online social contact, can support social relationships which can generate a sense of belonging.

Relocation to extra care housing may disrupt the offline relationships of extra care tenants, whereas online social contact is not restricted by place, allowing the continuity of relationships to be maintained, despite geographical separation. Therefore it can be argued that online social contact can provide continuity in the participants' social relationships, despite a housing transition, thereby meeting their need for intimacy and affection and supporting their progression towards self-fulfilment. This framework was also used to consider whether the prospect of adopting online social contact could prompt participants to initiate the independent action required to establish an internet connection, thus, addressing their higher level need for self-esteem. This would enable several higher-level needs to be satisfied, providing further support for the participants' progress towards self-fulfilment.

Max-Neef, Elizalde and Hopenhayn (1991)

Max-Neef, Elizalde and Hopenhayn (1991) adopted a non-hierarchical approach to the satisfaction of fundamental human needs, contending that with the exception of the need for subsistence, all other fundamental needs are interconnected and there is no hierarchy of needs to be satisfied. Max-Neef, Elizalde and Hopenhayn (1991) identify Fundamental Human Needs in terms of human conditions of Being, Having, Doing and Interacting and requirements for, and provision of, Subsistence, Protection, Affection, Understanding, Participation, Creation, Leisure, Identity and Freedom. This leads to circumstances whereby a single 'satisfier' could, potentially, fulfil many Fundamental Human Needs. Using this framework, it seemed that online social contact could potentially satisfy fundamental needs for Being, Having, Doing and Interacting, by providing opportunities to experience Affection, Understanding, Participation, Creation, Leisure and Identity. It could also be argued that Maslow's (1943:1968) hierarchy of human needs has commonalities with the needs identified by Max-Neef, Elizalde and Hopenhayn (1991) with the process of satisfying needs being a differentiator between their approaches.

The findings of this inquiry add to understandings of the satisfaction of Fundamental Human Needs in the context of extra care housing. While the social environment of extra care housing provided some participants with opportunities to meet Fundamental Human Needs for Affection, Participation, Creation, Leisure and Identity, this was only the case for those in a position to engage positively with the social world of the housing scheme. Where the social programme was limited, unsuitable or uninteresting to participants, and they felt little connection with fellow tenants, participants depended on access to the world beyond the housing scheme to meet many of their Fundamental Human Needs. Participants indicated how their uptake of online social contact created opportunities for the satisfaction of their social and emotional needs which would not otherwise have been addressed (pp.160-161, p.196).

Learning in later life

Learning in later life introduces an alternative lens for the consideration of the meanings of online social contact. It can be framed within the construct of successful ageing, with positive implications for social engagement, self-esteem and cognitive function. Jamieson (2012) contends that educational activity in later life can operate within a transitions model to support the process of coping with life transitions. This approach resonates with the experience of transition and age-related change which is an element of life as an extra care tenant. Jamieson (2012) draws on Schlossberg, Waters, and Goodman's (1995) 4-S Framework which identifies the situation, the strategy, the self, and the support as variables affecting the transition process, finding linkage between life events and learning in later life.

Participants' experience of learning

Bandura (1997) advises that a student's perception of their own skills and ability may determine the effort they apply to a task and thus impact on the extent to which their endeavours are successful. The findings of this study provide an understanding of the participants' evolving perceptions of themselves, as ICT users, as their digital skills developed. Schunk's (1991) findings suggest that personal and situational factors can influence skills acquisition. The participants' experience of learning to communicate online was situated in the sociocultural environment of an extra care housing scheme, with the practical, emotional and psychological factors associated with learning in a small group, where the majority of their peers were disinclined to study. The participants, however, reported pride in their achievements and the distinctiveness they felt it gave them, within their social environment.

Schunk (1991) has advised that comparison with 'similar others' can provide an indication of one's progress and encourage the acquisition of new skills. Within the computer group, participants learned alongside 'similar others' and shared their successes and difficulties with their peers within the group. They derived peer support and strove to emulate the

achievements of their fellow participants, who were also beginning to use the internet independently. Participants' expressions of self-efficacy, in respect of their internet use, produced a ripple effect across the group, leading to experimentation and, for some, the adoption of additional devices and applications. (See Findings p.193, p.195, p.199).

Summary and future developments

In this chapter the participants' digital journeys have been considered in the light of the theoretical framework of this inquiry and the research literature. The insights the participants provided into their aspirations and achievements enabled the complexity of their experience to be appreciated. Starting as internet novices, they acquired digital devices, developed internet skills and interwove their online and offline social interactions, in response to their need for social contact. The study was designed to enhance understanding of their shared and individual experience and can add to knowledge of this under-researched population. The findings may also help others to support extra care tenants in future engagement with ICTs and be transferable to a broader population of older adults living in supported housing schemes and the wider community.

The introduction of digital management systems by social housing providers, suggests that internet-based technologies will become increasingly significant in the lives of extra care tenants and may, potentially, increase their opportunities for online social contact. Tenants' social internet access can be included, by suppliers, as an element of a social housing management package. However, successful implementation of digital approaches to management and service provision, will also require the engagement or acceptance of extra care tenants, as service users. This in turn, requires an understanding of extra care tenants' perceptions of internet use, to which this study offers a contribution.

Chapter 10 – Conclusions and Recommendations

Introduction

This inquiry was designed to enhance understanding of extra care tenants' experience of using the internet for social contact. Little is known of extra care tenants' experience online and wider studies of older people's internet use have been found to exclude the cohort of older adults, living in supported housing schemes (Cotten, 2017; Hunsaker & Hargittai, 2018). Burholt *et al.*, (2013) and Gray and Worlledge (2018) suggest that online social contact may be beneficial for extra care tenants. However, the views and experiences of extra care tenants are rarely elicited in studies of social internet use. This inquiry offers a contribution which begins to address the gap in knowledge.

Contribution of this inquiry

The UK extra care population numbers approximately 51,000 individuals, a sizeable group whose individual experience of social internet use is largely unexplored. The findings of this inquiry capture the aspirations, perceptions and concerns of ten extra care tenants, appropriating the internet for social contact. The study enhances understanding of the ways in which the participants overcame disability, sensory impairment and frailty, to engage with others, over the internet (pp.178-179, p.187, pp193-199). The findings may also have transferability to a broader population of older adults, who share the participants' experience of later life transitions and internet uptake, while contending with age-related impairments and losses. Reflecting the participants' achievements, the findings also provide an insight into the participants' developing sense of themselves as agentic, autonomous beings, applying their digital skills to meet their social needs. The role of the small, informal peer support networks, which operated at both research sites, also illuminates an under-researched aspect of the participants' internet uptake as extra care tenants. For the participants, peer support facilitated internet access, enabled an informal exchange of knowledge and offered social and emotional support, as neighbours

worked together to develop their digital skills. The support provided by peers, strengthened social bonds among the participants and sometimes met their needs more appropriately than familial support.

As their internet skills grew, participants began to curate their online identity. Consideration of one's self-representation online tends to be associated with younger internet users (Bareket-Bojmel, *et al.,* 2016; Oleszkiewicz, *et al.,* 2017) whereas the findings of this inquiry indicate that the participants, whose ages ranged from 56 to 98 years, also curated their online presence and associated themselves with people, places and activities which they anticipated would retain the attention of their audience. Social internet use also enabled participants to reconnect with their younger selves, rekindling friendships, regaining lost skills and restoring continuity in their personal biography, which Kaufman (1986) advises is a critical resource for adapting to change and remaining healthy.

In the changing digital landscape of the Covid-19 pandemic, extra care tenants' social internet use, which has been somewhat overlooked as a research interest, may be recognised as a means of combining family support with social distancing measures. When a participant commented that family contact over Skype, '*keeps you alive!'* the significance of online social contact, during the enforced separation of the Covid-19 pandemic, could not be clearer.

This inquiry begins to provide a response to the call for more nuanced understandings of older adults' experience of using the internet (Matthews & Nazroo, 2015; Damant & Knapp, 2015; Khosravi *et al.,* 2016; Quan-Haase *et al*, 2016; Hunsaker & Hargittai, 2018; Nowland *et al*, 2018) by illuminating the contribution of online social contact to extra care tenants' feelings of social connection. As a wide research interest in older adults' internet use is indicated and the experience of extra care tenants has some transferability to older adults in general, the study also offers insights which may begin to enhance understanding across a broader population of older individuals.

Future opportunities for digital engagement

The Covid-19 pandemic has heightened the risk of loneliness and social isolation for older individuals, including extra care tenants, and the lessons

learned from the participants' experience of online social contact have wider implications for the older population in general. In the UK, a national programme of ICT training is needed, to ensure that older individuals, who would like to communicate online, can acquire the skills to do so. Additionally, opportunities for online social contact may emerge, as advances in health and care management lead to the installation of telecare, telehealth and digital management systems across the range of older adults' supported housing schemes. The installation of such systems, can increase tenants' opportunities for internet access, thereby assisting them to maintain their social relationships online. Where digital care management systems usher in opportunities for online social contact, the quality of life for extra care tenants and a wider population of older adults, may be enhanced through social internet use (pp.198-199; pp.204-205).

Research Aim and Objectives

In conducting this inquiry, the research aim, to explore the meanings of online social contact, for extra care tenants, was approached through a series of interlinked objectives (p.7). The aim and objectives are re-presented below and their contribution to the study is indicated. The conclusions which are drawn from the findings and subsequent discussion, represent a model of the participants' being and relating in a digital world.

Overarching Aim

To explore the meanings that extra care tenants attribute to using the internet for social contact.

Objectives

- To explore the extra care tenants' experience of using ICT based technology for social contact, with particular reference to the participants' perceptions of their own equipment.

- To explore the extra care tenants' aspirations for and expectations of, online social contact.

- To investigate extra care tenants' experiences and concerns about using the internet for social contact.

- To understand the experience of using the internet for social contact in the context of life as an extra care tenant.

The participants' journey to becoming internet users and their subsequent experience of online social contact were presented in Chapters, 6, 7 and 8. In Chapter 9, the meanings the participants attributed to their online social contact were discussed and the implications were considered. In Chapter 10, conclusions are drawn and recommendations made, based on the implications of the findings.

Implications of the participants' faulty devices

An exploration of the participants' experience with their digital devices revealed the range of equipment in their possession and the impact of old, faulty equipment, as a barrier to internet uptake. The findings indicate that the tendency within some families, to pass on an unwanted device, to an older relative, could impede the recipient's successful engagement online. However, for the participants, disappointment with their second-hand devices, prompted them to invest in a device of their own choosing. Thus they became agentic in terms of acquiring more appropriate digital equipment and subsequently enhanced their experience of online social contact and their sense of themselves as autonomous users of digital devices.

Implications for the participants' agency, self-expression and self-confidence

With their entry into extra care housing, older individuals relinquish some of the responsibilities associated with managing one's own home in the community. While the perception exists that supported housing correlates with some loss of agency and personal responsibility, most participants willingly assumed responsibility for their digital devices and internet connections, although they had little previous knowledge of the technology. It therefore seems that the acquisition and use of digital

devices and the infrastructure which supports them, may be an avenue through which extra care tenants can maintain, and express, agency within a managed housing environment. The participants identified their wish for online social contact as the primary motivation for their use of the internet. In satisfying their aspiration to communicate online, other needs, for agency, responsibility and self-confidence were also met.

The participants' aspirations for and expectations of using the internet for social contact, developed temporally, with the reach of their online activities generally increasing as they became more self-confident. The participants' ability to represent themselves, online, also evolved temporally and for some participants, the experience of sending an email became more than the mechanics of the process. They began to consider whether their online communications were well-written and interesting and how these representations of themselves and their own life, would resonate for the recipients of their communications. Participants also became aware of the possibility of inappropriate representations of themselves, by other internet users, and they responded to the hazards of internet use by taking measures to protect their online security. The participants' increasing skills and self-confidence with their digital devices, led some to apply technology, successfully, in other areas of their lives. Through the course of this longitudinal study, the participants' sense of themselves and their digital world, developed and changed, with some expressing pleasure as they felt their digital skills enabled them to *'become part of the modern world'* (p.205).

Meanings of participants' devices

The participants were challenged in using their digital devices. Age-related physical and sensory losses and limited dexterity were, initially, reported as barriers to their use of the internet. Participants later highlighted the strategies they adopted and adaptations they made, to manage the challenges they faced. The meanings which the participants ascribed to the physical presence of their digital devices within their own flats, varied significantly between participants, some of whom owned

one device throughout the study, while others made multiple purchases of digital equipment. The meanings of their digital devices were explained by the participants. For some participants, their digital devices were a connection with their geographically remote family, while for others, they were a representation of modernity and the world outside the housing scheme. One participant described her laptop as a *'great big fossil'* (p.177) while another called her device an *'old thingy'* (p.151). Meanings were also indicated by the condition of the devices themselves and their relative prominence within participants' living space. Beyond the practical and social aspects of online social contact, the participants also reported a developmental element to their online experiences. Using the internet for social contact enabled the participants to enhance their skills and continue their personal development in new directions.

Maintaining social relationships

This inquiry established that some participants felt lonely following their transition to extra care housing and while the social programmes at Locations 1 and 2 provided opportunities for tenants to meet together, they could not completely satisfy the participants' need for meaningful social relationships. Evans & Vallelly (2007) suggested a strong bond of friendship can develop between extra care tenants. However, as Burholt *et al.* (2013) indicated, extra care tenants' need for social relationships extends beyond the housing scheme, encompassing friendships of long duration, with community-dwelling individuals. Participants attributed great significance to maintaining their long established social relationships and adopted online social contact, to maintain their familial ties and friendships in the community. Some participants also rekindled dormant friendships online, while one participant used the internet to establish new social relationships.

Most participants found that face to face meetings with family and friends, became less frequent as they grew older, while social internet use provided opportunities to maintain relationships, using email, messaging, Skype or social media platforms. Participants then adopted a mode of online communication to suit their own skills or to overcome age-related impairments. Some participants preferred visual and voice

modes, with others preferring text or a combination of text and voice. Their online social contact was then interwoven with face to face meetings or telephone contact with the same individual. Extracts from a participant's written interviews indicate her appropriation of the internet, to meet her need for social contact, as she interwove online and offline communications to overcome her difficulties with speaking (pp.75-76) Another participant, whose spelling had deteriorated, chose to replace her communication by email, with more frequent Skype calls (p. 194). Thus participants were able to maintain their social connections by changing their mode of online communication, when age-related losses made their original mode of contact unserviceable.

Participants' distinctiveness and change

The participants found that their social internet use contributed to their quality of life in other ways. Their acquisition of digital equipment brought about tangible changes to their living space while their technical skills enhanced their self-esteem. Membership of a computer group changed their status, allowing them to establish their distinctiveness within the housing scheme, as their technical knowledge differentiated them in their social environment. Being online in a largely offline environment led most participants to associate their use of the internet with self-efficacy, independence and modernity. Participants remarked that this was particularly significant in an environment where they sometimes felt remote from *'the modern world'*.

For the participants, the uptake of online social contact was also an experience of change, in themselves and in their daily life. Participants found change emanated from their actions, as they established an internet connection, managed their online presence and engaged with others online. Social internet use led to changes in the domestic and social spheres, where they found other applications for their digital skills. Participants' sense of their personal history changed as they rekindled dormant friendships and digitally revisited significant people, places and events from their earlier years. Thus while experiencing

change, they also maintained and, in some cases, restored, a continuous sense of their personal biography. Some participants also linked social internet use with a return of some attributes of their younger selves which they believed had been lost. Change was an experience common to all and was actively sought by some participants who hoped to address problematic relationships through online social contact (pp. 188-189).

Timeliness of the inquiry

With the enforced social isolation of vulnerable individuals, during the Covid-19 pandemic, the benefits of online social contact as an alternative to face to face meetings and family visits, suggest the timeliness of this study. Appello (2020) in a publication, jointly with the Housing Learning and Improvement Network, advise that 85% of housing providers surveyed, state that their perceptions of technology have changed as a result of COVID-19. Appello (2020) further contend that it is critical to the wellbeing of supported housing residents that a digital alternative to face to face contact is provided. This study offers an insight into extra care tenants' experience of internet adoption, access and use which could support successful internet uptake in other housing schemes.

The overarching aim of this study was to explore the meaning of online social contact for ten extra care tenants who were initially internet novices. It was anticipated that the findings of this inquiry could also contribute insights which may enhance the teaching of digital skills to extra care tenants. As the study progressed, broader applications were also indicated. The 'digital by default' UK government approach to service delivery, has the potential to impact negatively on non-users of the internet, including extra care tenants. However, experience of online social contact can build an individual's confidence to communicate online, for other purposes. One participant began to utilise the internet for voluntary work (p.136) and this can extend to interactions with government services agencies.

Concurrently, the introduction of technologies for Smart Homes, the Internet of Things and the digitalisation of health and care services will

bring extra care tenants and the wider population of older adults, into contact with internet-based services which they will be encouraged to use. Some extra care tenants may find these online services unfamiliar and daunting. In this situation, it would be helpful for facilities managers and carers to have an understanding of tenants' concerns, and personalise their approach, when tenants are introduced to an unfamiliar technology. The Digital Capability Framework (2018) sets out an approach to digital skills training, for the UK health and care workforce, which can be adopted to increase employees' digital literacy. Extra care tenants and a broader cohort of older adults, may feel empowered to exercise choice in their adoption of digital telehealth and telecare services, if they, and their carers, are confident internet users. While this inquiry has explored extra care tenants' experience of online social contact, aspects of the findings may be transferable to other online applications and to the situation of older adults living in other housing environments.

Inquiry methods and my learning experience as a researcher

Throughout this longitudinal inquiry, the complex, nuanced and changing nature of the participants' appropriation of online social contact and the added complexity of the extra care environment, became apparent. As the inquiry developed, temporality intersected positively with the participants' increased skills and sometimes, negatively, with the participants' reduced capacity. The longitudinal approach enabled changes in participants' skills, social environment and their sense of self to be recognised.

Rossman and Rallis (2012, pp.3-4) advise that academic inquiry can provide a multiplicity of learning experiences for the researcher. This inquiry enabled me to develop research skills and build the confidence to apply them. In-depth interviews which were a primary method of data collection, yielded nuanced insights into the participants' physical, social and digital life worlds. As the participants articulated their experience, I began to appreciate the difficulties participants faced in learning to use the internet and to respect their focus and determination as they developed their digital skills. Interwoven with the series of interviews, the use of participant diaries introduced thoughts and activities recorded in the moment. Diary entries brought new insights and were enlivened by

humour, as the participants documented their use of communications technology. Diary data also reflected the participants' frustration as internet-based technology was occasionally unreliable but was nonetheless assimilated into their daily life Individual word clouds, created from participants' diaries, provided an exploratory tool for analysis of the raw diary data, prior to the thematic explication of the transcribed texts.

Extracting the meaning from interviews and diary data, yielded new insights into the complexities of written and spoken communication. Ricoeur (1976 p.29) comments on the differences between the nature of speech and that of writing. He notes that speaking takes place primarily in the moment, often has a visual component and is generally addressed to those present, who can respond immediately. However, with written text, there is a temporal distance between the writer and the reader and this is anticipated in the writing process. A written text, such as a participant diary, is a record kept by an individual, for a reader to access, at a later date. However, the absence of the reader at the time a text is written, makes the interpretation of the text more complex for the reader, as temporal or spacial distance increases the difficulty of aligning understandings (Ricoeur, 1976, p.30). The participant diaries were kept for a period of two weeks and were explicated shortly afterwards, during semi-structured interviews. Diary data provided a distinct and different insight into the participants' use of communications technology in daily life.

Adaptations to research methods

A series of written interviews facilitated the inclusion of a participant whose speech was severely limited (pp. 105-7) while a scribe supported a blind participant who dictated his participant diary (pp. 107-8). The participant with limited speech, who took part in a series of written interviews, had a long-term depressive condition and her network of friends was quite small. She used the written interviews to express her perceptions of online social contact and to articulate the pleasure she found in using the internet, to maintain her long-established friendships. I was privileged to be given some glimpses of this participant's lifeworld and the challenges of her daily life. With little speech, face to face conversation, the landline and Skype were a source of frustration and difficulty for her,

whereas email was a tool whereby she could maintain her social relationships. Her friendships, spanning many decades, were a source of pride and enabled her to maintain a coherent sense of self and her place in the world. An adaptation to the use of solicited diaries enabled the blind participant to engage fully in the inquiry. With the help of a scribe, his dictated diary reflected his early frustrations with technology, and later, his appropriation of internet enabled devices, for social contact, entertainment, navigation and cooking.

Other researchers have also adapted their research methods to enable older adults to participate in their studies. Bartlett (2011; 2012) adapted the conventional written approach to participant diary keeping, to include photography and audio diaries. This enabled older adults living with dementia, to engage with Bartlett's study of daily life, in a participatory way. Bartlett (2011) provided her participants with advice on keeping a diary, and this was adapted, as guidance for participants keeping diaries for this study (Appendix 3.i)

My association with the participants provided opportunities to start to comprehend their lifeworld of extra care housing and their experience of learning to communicate online as an older individual. While I had some prior knowledge of the difficulties faced by older adults, taking up ICTs, my understanding was greatly enhanced as a result of undertaking this study. Recognising the participants' efforts to overcome physical, sensory and some cognitive age-related losses, I adapted my teaching methods, to address, more directly, the barriers to their use of the internet. The accessibility of digital devices, for older adults, has been studied by other researchers. Customised email, web search and navigation systems were trialled by Dickinson *et al.*, (2005; 2007) while the use of tablet computers was found to increase internet accessibility for older internet novices (Tsai *et al.* 2017; Ramprasad *et al.*, 2019). The design of digital devices, for ease of use by older adults, is a significant issue, worthy of further research but it is beyond the scope of this inquiry.

Limitations of this research - sample size and location

This inquiry explored the meanings of online social contact for a group of ten extra care tenants living in north east England. The sample size and the geographic location may be considered limitations to the transferability of this study. While a sample of ten participants is acceptable for a phenomenological inquiry (Morse, 1994; Cresswell, 1998), where participants are experiencing ill-health or frailty, there is a possibility of attrition which could result in a thin data set. In this inquiry, ill-health led three participants to withdraw and another participant died, before the data collection activities were complete. However, data was collected at the outset from all ten participants and their data, combined with that of the six participants who completed all the data collection activities, was rich enough for analysis to take place. The rich data and the contextualisation of the findings enhance transferability, enabling the study to contribute to wider understandings of older adults' social relationships, their adoption of ICTs and experience of learning in later life. The sample reflects the composition of the computer groups at the two research sites. With participants aged between fifty six and ninety eight years, the sample is representative of the age range of extra care tenants across the UK. However, with one male and nine female participants, it is unbalanced in terms of the gender ratio in extra care housing schemes. A ratio of two female tenants to one male tenant has been suggested as more typical (Housing LIN, 2016). Studies based in other UK locations could yield a more representative sample in terms of the gender ratio.

The geographic setting, with the two research sites located in north east England, may be perceived as a limitation. The research sites varied in that one was set in a small market town, whereas the second site was located in an urban setting. Experience takes place within a context which is influenced by social and cultural norms and these may derive, to an extent, from their locality. Fischer (1982) and Amato (1993) reported differences between the social networks of small town and city dwellers. Drawing on Fischer (1982) and Amato (1993), the urban and rural settings of this inquiry had the potential to reflect diversity among the participants' social

networks and capture varied life experience within the sample. While the findings may be transferable to a broader population of older adults, other researchers would need to consider the potential influence of any regional, social and cultural norms which could affect transferability to their own area.

Research by a practitioner

I had some fore-knowledge of the research sites, which were the location of my computer groups. It has been argued that a researcher's dual roles can be a limitation to a study. Bogdan & Taylor, (1984) suggest that research by a practitioner may lack objectivity, while Field & Morse (1985) advise that the researcher should be a stranger to the research site. Hanson (1994), however, counters this argument, suggesting that researcher fore-knowledge of the setting can contribute to an insightful study, while Tomm (1993) contends that a dual relationship increases human connectedness and can be beneficial to an inquiry.

My experience as an ICT tutor provided the impetus for the inquiry and the data was derived from the computer groups that I was teaching. It could be argued that different findings may have emerged, had I completed the study with extra care tenants, taught by a different tutor. However, as indicated previously (Gray & Worlledge, 2018) computer groups are infrequently found in extra care housing schemes and none were known to me. Tomm's (1993) contention that human connectedness can enhance the research process seemed to be borne out by my experience with the participants. Ashworth's (1986) advice that the researcher's fore-knowledge of the research subject, may lead to understandings which other researchers could miss, (pp.18-19) correlates with Gadamer's (1975) contention that a researcher's foreknowledge of the research issue, can be helpful to an inquiry. The approach seemed appropriate for this study which drew on Gadamer's hermeneutic phenomenology as a research methodology.

Recommendations for policy, practice and further research

Policy - digital inclusion – participants' internet access

Digital inclusion is associated with social connection, good health, skilled work and higher income (Helsper, 2008) and it has been a focus of UK public policy since the 1990s. Nonetheless, in 2019, four million adults in the UK had never used the internet and two and a half million non-users were aged seventy five years and older (ONS, 2019). There is evidence, however, that older age need not be a barrier to internet uptake. The findings of this inquiry demonstrated that extra care tenants, with no previous internet experience, could acquire the skills and confidence to become proficient and autonomous internet users, thereby enhancing their social engagement and their sense of themselves as agentic actors.

As indicated in the findings (pp.164-165), internet access is not always available in extra care housing schemes and this was the case when the participants adopted online communications. While, ultimately, the requirement to purchase digital equipment and establish a contract with an internet services provider, gave the participants renewed agency and self-confidence, initially, the lack of internet connectivity was problematic for the participants. It is therefore recommended that Wifi be made available, as a standard service, in extra care housing schemes. Although Wifi is provided in student accommodation, hotels, hospitals and other public buildings, popular perceptions of older adults as technologically inept (McDonough, 2016; Schreurs *et al.*, 2017) may have led to a presumption against extra care tenants as internet users. Readily available internet access would support tenants' independence and social engagement which are fundamental to the extra care ethos. In the longer term, the digitalisation of care management systems may provide opportunities for tenants' internet access, but current tenants should not have to wait for an opportunity to communicate online.

Policy - digital inclusion - internet skills training for older adults

Online social contact can contribute to older adults' social connection, health and wellbeing, as indicated in this study's findings (pp. 195-199). A lack of digital skills can contribute to feelings of inadequacy and regret

(p.14) and many older adults cite their lack of digital skills as a barrier to their use of the internet (ONS, 2017[2]). With the ubiquity of digital devices and the exclusion of non-users of the internet, from popular online activities, it would seem appropriate to address older adults' non-use of the internet by increasing public funding for their training in ICT skills. The findings of this inquiry indicated that the participants felt that they benefitted from learning to communicate online. Participants found that their social internet use supported, rekindled and brought about new social connections which Victor & Bowling (2012) argue enhances the quality of later life.

The current UK Digital Strategy (2017) contains an element of ICT training for community-dwelling older adults. However, the primary policy focus is the application of digital skills in the workplace. Consequently, ICT training can be difficult to access, for adults who have left the workforce and digital skills are rarely taught in extra care housing schemes (p.209). There is a need for a more inclusive national approach to ICT training, which would provide opportunities for older adults and others outside the workforce to acquire digital skills. From 2010 to 2011, the Get Digital Programme brought ICT training to nearly 3,000 sheltered housing scheme residents, in England. Get Digital was designed to meet the needs of older learners and though successful, it was never replicated, due to funding constraints (Niace, 2012).

The findings of this inquiry demonstrate that extra care tenants can learn to use the internet and benefit from communicating online. A more inclusive approach could incorporate elements of the Get Digital Programme and make tailored ICT training available in extra care housing schemes and across older adults' supported housing in the UK. The findings of this inquiry indicate that ICT training interventions for older adults, need to be individualised, to address the specific needs of the learners. Visual impairments are frequently experienced by older individuals and participants required personalised support to address their sight loss. Whereas one participant required enlarged text, another was affected by the quality of the light and lighting was adapted to reduce screen glare. A third, who was blind, required specialist software for

visually impaired adults. Any requirements for specialist support can be determined at the outset of training, through discussion with the older individual. Such support can then be adapted, should additional needs emerge with the passage of time.

Policy - social inclusion – computer groups

Establishing on-site computer groups, for tenants to develop their digital skills, would address their need for social contact, on a number of levels. The Findings of this inquiry indicate that the participants aspired to using the internet for social contact, with some participants also referring to their loneliness as extra care tenants (pp.153-154). Cattan *et al.,* (2005) found that successful interventions to alleviate loneliness, in older age, would often involve groups coming together for an educational activity. This is demonstrated by the participants' experience. Attendance at the computer groups, brought participants together, once a week, for the social and educational activity of learning to use the internet. The participants' digital skills were then applied to enhancing their social connections with family and friends. Between computer group meetings, some participants also met together, as a smaller group, to support each other in developing their internet skills. Thus computer group membership provided participants with a range of online and offline opportunities for increased social connection.

Expanding the provision of internet skills training, within extra care housing schemes, could therefore provide tenants with social and educational benefits. It could also contribute to the alleviation of loneliness, through tenants' increased social interactions both online and offline. Participants also found that learning to use the internet could be a 'social good' providing them with wider opportunities for self-development beyond the acquisition of the specific skills taught on the programme of internet training (p.199). Researchers (Purdie & Bolton-Lewis, 2003; Jamieson, 2012; Hyde & Phillipson, 2014) have found that learning in later life is associated with additional health and social benefits, for learners, including increased self-efficacy, problem solving skills and

self-confidence, and these social benefits also resonate with the extra care ethos.

Practice – local technical support for novice computer users

Difficulties with their devices sometimes occasioned participants to seek local technical support. Familial support was not always available and participants commented that, ideally, they would prefer to receive basic technical assistance from the care staff. However, they found this could be problematic, as carers' time and their digital skills were sometimes limited (pp. 154-155). The significance of readily accessible technical support, for novice computer users, is well documented (Schreurs *et al*, 2017; Damodaran & Sandhu, 2016; Hill *et al*., 2008; Age Concern and Help the Aged, 2009; Selwyn, 2004). Damodaran and Sandhu (2016) have also noted that the quality and reliability of local technical assistance can vary considerably.

To address the tenants' need for local technical support, the housing provider adopted a Digital Champions Programme, across their portfolio of extra care housing schemes. In some locations, tenants with digital skills were recruited as voluntary Digital Champions, to support their peers, while at Location 1, the formalised nature of the role discouraged participant involvement. Digital Champions Programmes can also be based on a professional or work-based model. A Digital Champions Programme, engaging designated on-site carers, trained and remunerated to provide tenants with basic technical support, may be more successful than a programme drawing on the voluntary services of other tenants. Readily available technical support, provided by carers on an informal basis, could assist tenants to resolve computer problems in a timely manner. Guidance and encouragement from a local Digital Champion could support tenants' ongoing engagement and reduce the possibility of their lapsing, as internet users. As these Digital Champions would be employed by the housing scheme, their availability for consultation with tenants would be predictable and basic problems with a tenant's digital device could be promptly resolved. In-house Digital Champions could be considered to offer a facilitative service, having some commonalities with

befriending services, handyperson services, luncheon clubs and domestic support. Access to an in-house Digital Champion could reduce the pressure on an older individual, facing a technical challenge, alone.

Recommendations for further research

Wider internet use across older cohorts

At the outset of this inquiry it was noted that researchers had called for a more nuanced understanding of older adults' heterogenicity and its evidencing in their use of the internet (Nowland *et al,* 2018; Matthews & Nazroo, 2015; Damant & Knapp, 2015; Khosravi *et al.,* 2016; Hunsaker & Hargittai, 2018; Quan-Haase *et al,* 2016). Extra care tenants' heterogenicity emerged from the findings of this inquiry and the participants' diverse experience of online social contact was presented in Chapters 6, 7 and 8. However, research into extra care tenants' wider use of the internet, for instrumental purposes, hobbies, interests and entertainment, could provide a more complete understanding of internet use, by the extra care population and lead to the provision of online services, tailored to meet their needs. Community-dwelling older adults and older individuals living in sheltered housing, residential care or nursing homes, may engage with the internet on a similar basis to extra care tenants but at present, the transferability of findings between settings has not been explored. Studies of other cohorts would contribute to a more comprehensive understanding of the online activities and experiences of older UK population.

The need to enhance understanding of older individuals' online activities, is supported by Hunsaker & Hargittai, (2018) in an international review of internet use among older adults. These researchers found that older adults *'living in supportive care' (p.3949)* were excluded from studies of internet use. Hunsaker & Hargittai, (2018) advised that participation in future research should be extended to include these individuals. As internet access is not always available in older adults' housing, the experiences of those for whom it is available, could contribute significantly to policy considerations for future housing developments. The comments of Hunsaker & Hargittai, (2018) resonate with the situation in the UK.

Statistics on internet access in extra care housing schemes are not collected and few details are available for internet access in other forms of older adults' specialist housing. There is a need for research to provide an understanding of the availability and use of the internet across the range of older adults' housing. Study outcomes may then influence internet availability for future housing scheme residents.

At the time of finalising this study, the onset of the Covid-19 pandemic has impacted older adults' supported housing severely, increasing loneliness and social isolation among older individuals. The social outcomes for individuals, with internet access and skills to communicate online, compared with outcomes for residents utilising the landline or mobile phone only, could be explored, to inform future practice.

Health impact of internet use

While internet use is associated with social inclusion (Helsper, 2008; Age UK, 2018) and, thus, with a positive impact on health, there are indications that, in certain circumstances, internet use may be associated with mental health detriments, depression and loneliness (Fang *et al.,* 2019; Nowland *et al.,* 2018; Sum *et al.,* 2008). While the Findings of this study indicated that online social contact led to enhanced participant wellbeing, health impacts were not a focus of the inquiry. Since a potential association has been indicated between depression, loneliness and addictive internet use this is also an area for further research.

Digitalisation of health and care systems

Advances the digitalisation of health, housing and care management systems, highlight the need for older adults to have some engagement with digital devices and online applications. These devices and applications will be unfamiliar to some older individuals, who may be reluctant adopters of new technology. Health and care professionals, working with older adults, will need to be confident users of these digital systems and will require an understanding of the older users' perspective. On this basis, the attitudes and concerns of older adults and those working with them, could form the basis of further research across this rapidly developing field.

In summary:

The aim of this inquiry was to explore the meanings of the lived experience of online social contact, from the perspective of a sample of extra care tenants, using the internet to maintain their social relationships. The inquiry stemmed from my professional interest in the experiences of older individuals, adopting social internet use in later life. Little had been found in the literature and initially my goal was to expand my own knowledge, and potentially enhance teaching practice. As the inquiry progressed, however, it became clear that there was a wider research interest in the diversity of older adults' engagement with ICT (Damant & Knapp, 2015). Extra care tenants' use of the internet is under-researched and it appeared timely to explore this topic, as the digitalisation of health and care management systems could extend tenants' opportunities for social internet use. At the same time, tenants' co-operation may be required for digital management systems to operate successfully. It was anticipated that an inquiry into the participants' social internet use could provide new understandings of older adults' lived experience of adopting digital devices and relating to others in a digital world.

Transition is a common occurrence in later life. A transition from life in the community to an extra care housing scheme can disrupt an older adult's social networks, with the potential for loneliness and social isolation to ensue. In exploring the participants' perceptions of online social contact, an interpretative, hermeneutic phenomenological approach enabled me to access the participants' experience of being and relating in the digital world, as extra care tenants. Semi-structured interviews and solicited diaries, provided insights into the participants' social and digital worlds, responding to calls by earlier researchers (Matthews & Nazroo, 2015, Damant & Knapp, 2015) for nuanced understandings of older adults' social internet use.

Drawing on the three main psychosocial theories of ageing, Disengagement Theory, (Cumming & Henry, 1961) Continuity Theory (Atchley, 1989) and Activity Theory (Havighurst & Albrecht,1953; Havighurst, 1961) enabled me to note the participants' complex and nuanced approach to their social relationships. The theories of aging

predate the widespread use of the internet but they offer understandings of older adults' social relationships which are current in the internet age. The findings of this inquiry indicate that social internet use enabled the participants to create distance in social relationships, bring individuals together and to maintain a full programme of social activities. Some participants adopted a combination of disengagement, continuity and activity theory approaches, to manage their relationships with different individuals, within their social networks (pp.195-196, pp.202-203). Thus it is possible to build on knowledge which dates back some forty years, to reach new understandings of the management of social relationships, at the present time.

Also emerging from this inquiry, was a current application for the Arber & Ginn, (1991) model of the resource triangle whereby older adults progressively mobilise their resources, to meet their changing needs (pp.212-213). The Arber & Ginn model was developed prior to the ubiquity of the internet but can resonate for the situation of extra care tenants and the broader population of older individuals, in the internet age. An extension of the Arber & Ginn model is therefore proposed, highlighting the contribution of internet use, to older individuals' progressive access to material, caring and health resources, as their needs change over time. This could have implications for the ability of older adults to live independently and would thus be of interest for further research.

A sense of self-efficacy and distinctiveness, emerged from the participants' social internet use, in their largely offline extra care housing schemes, contributing to their sense of themselves as agentic beings. Participants found that online social contact enabled them to maintain familial roles, rekindle old friendships and experience continuity in their personal biography. Most participants found their internet use transformed their ability to manage their social relationships and led to an expansion of their horizons, both online and offline. The complex intertwining of online and offline social contact and the application of digital skills for hospitality, entertainment and cooking were also remarked upon by participants. This study offers a nuanced insight into the participants'

experiences online, adding to understanding of their achievements and challenges, in taking up internet use in later life. They were generous in bringing me into their digital world. Being and relating in a digital world, was an experience the participants shaped in their own way, as it transformed their experience of life as extra care tenants.

APPENDIX 1.i

Research into Internet use in Extra Care Housing Schemes

Information Sheet for Participants

You are being invited to take part in a small research project. The aim of the research is to find out what using the internet means for Extra Care tenants. Everyone who has been involved in the computer club will be invited to take part but you can be part of the computer club without being involved in the research. The computer club tutor is also the researcher, working towards a research degree at Northumbria University.

Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask me if anything is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is this about?

As someone who uses the internet and who lives in an Extra Care Housing Scheme, you are invited to take part in three one to one interviews, about internet use in Extra Care Housing Schemes.

There will also be an opportunity to keep a diary about using technology, including the internet, to contact people. (By technology, I mean a telephone or mobile phone, desktop computer, laptop, iPad or tablet.)

I will provide a notebook to use as a diary and give you a leaflet that explains how to fill it in. It would be helpful if you could keep the diary for two weeks between the first and second interview.

You can choose to keep an audio diary or to have 2 short phone or Skype calls, with me, each week instead of keeping a written diary.

I often teach the course ‘Using the Internet’ and would like to find out what using the internet means to tenants living in Extra Care Housing Schemes. A number of people using the internet and living in Extra Care Housing Schemes will be asked how they feel about using the internet, particularly for making contact with people.

Why this focus?

The views of Extra Care tenants will provide useful information about the meanings of internet use in for people living in Extra Care Housing Schemes.

What does this involve?

If you are interested in taking part, I can arrange the interviews at a time that is convenient for you. The interviews will last for up to an hour and you can end the interviews at any time.

The interviews will be private and will cover using technology (telephones, mobile phones and computers) for contacting people. The interviews will be at a different time from the computer club.

The first interview will be about using technology for contacting people and will cover using an ordinary telephone, mobile phones and the computer. I will ask how you use technology to keep in touch with people and how you feel about different ways of keeping in touch. There will be

an opportunity to keep a diary about using technology to contact people and I will talk to you about that.

The second interview will take place about one month later and will focus on using the internet to contact people. The interview will be about your experience of using the internet and any plans you have for using it in other ways. It will cover how you feel about using the internet and any problems there may be. I will also ask about any help that might make it easier for you. If you have agreed to keep a diary, we will also talk about that.

The third interview will take place about one month later. If you have told me about any problems with the internet, we will discuss that again. I will be interested in how you are using the internet and what it means to you in your daily life - for example whether you use the internet to keep in touch with family or friends. I will also be interested in any other uses.

If you are willing to take part, I will check that I have understood your views correctly after each interview and at the end of the research.

If you change your mind about participating, you can withdraw from the research at any time without giving a reason.

Will my taking part in an interview be kept confidential?

With your permission and your informed, written consent the interview may be audio recorded. The information you provide will be made anonymous, after it has been analysed, by removing any personal details so that you cannot be recognised from it. I may use what you say during the discussion in reports but will make sure that you cannot be identified. You can, of course, decline for the interview to be recorded and I may ask to make notes throughout the interview. All data will be securely stored. Data storage and use will comply with the Data Protection Act 1998 and all data will be destroyed two years after

completion of the research. Diary data will also have any personally recognisable details removed. It will be stored securely and any audio taped data will be destroyed after it has been transferred to a password protected computer. I will return the diary to you if you would like it back, otherwise it will be kept securely and destroyed two years after the research is completed.

What are the possible benefits of taking part?

You may not benefit directly from this study. However, I hope that what we find out from these interviews will increase knowledge and understanding of the meaning of internet use for older people living in Extra Care schemes.

Are there any disadvantages?

Taking part will involve time commitments for the interviews and diary keeping.

What happens if you want to withdraw?

You are free to withdraw from the study at any time without giving a reason.

If you have already given me some information (data) for the study and then withdraw, if I have removed your name and any personal details from the data, you will not be able to withdraw the data you have given me.

What will happen to the findings?

The findings will be used to produce a report on the meanings tenants living in Extra Care Housing Schemes attribute to using the internet.

Who has reviewed the plan to carry out the interviews?

The study has been reviewed by the Northumbria University, Faculty of Health & Life Sciences, Research Ethics Committee.

Contact for further information

If you would like further information, please contact:

Jill Wales, Researcher

Tel: 01325 718362

E-mail: jillwales77@yahoo.co.uk

If you have concerns about any aspect of the research, please contact

Prof. Glenda Cook

Principal Supervisor

Northumbria University

Department of Health & Life Sciences

Tel: 0191 215 6480

E-mail: glenda.cook@northumbria.ac.uk

Thank you for taking the time to read this, and for considering whether to take part.

You will be given a copy of this information sheet and a signed consent form to keep.

9.7.13

Appendix 1.ii

4 West Layton Manor
West Layton
Richmond
North Yorkshire
DL11 7PT

9.7.2013

Dear

Research into the meaning of internet use in Extra Care Housing Schemes.

I am a tutor who teaches computing and the internet to older people. I am also working towards a Professional Doctorate in Education, at Northumbria University. I am asking for your help in carrying out some research into the use of the internet by people living in Extra Care Housing Schemes. The aim of this research is to find out what using the internet means for Extra Care tenants and particularly whether it can help you to keep in touch with people.

I am writing to ask if you would kindly consider taking part in three one to one interviews with me. Everyone who joins the computer group will be asked if they would like to participate but you can join the computer group without taking part in the research.

The interviews will be about using technology for social contact in an Extra Care Housing Scheme, how you feel about using the internet – possible benefits and possible problems – and ways in which we could make it easier for you to use the internet. The first interview could take place quite soon. The second interview would be about four weeks later and the last interview will take place about a month after that. I will also ask if you would be willing to keep a diary for two weeks. The diary will be about using technology for contacting people.

There are three interviews because will cover different topics at each interview and because your ideas about internet use might change as you think more about it. The interviews will last for up to an hour but you can end the interview at any time. The interviews will take place separately from the computer group. If you are willing to help, I will check that I have understood your views correctly, after each interview.

Ethical approval for this study has been sought and granted from the Faculty of Health and Life Sciences Research Ethics Committee, University of Northumbria, Newcastle. I have also provided you with an information sheet about the study and am providing a written consent form that outlines confidentiality and anonymity agreements.

If you would like to take part in this study, can you please complete the Consent Form and return it next time we meet. If you would like any further information about the study please do not hesitate to contact me at the above address or on 01325 718362.

Thank you for taking the time to consider this request.

Yours sincerely

APPENDIX 1.iii **CONSENT FORM**

Research Subject: Internet use in Extra Care Housing Schemes

Yes I agree	No I do not agree

Name of Researcher: Jill Wales

1. I confirm that I have read and understood the information sheet dated 2.7.2013 for the above study and have had the opportunity to ask questions. ☐ ☐

2.I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason. ☐ ☐

3.I understand that if I choose to withdraw, information will be retained once it has been anonymised and analysed. ☐ ☐

4.I understand that I will be taking part in one to one interviews about my opinion of using the internet in an Extra Care Housing Scheme and that the researcher will contact me afterwards to check details. ☐ ☐

5. I agree that the interview can be audio tape-recorded. ☐ ☐

6. I agree that anything I say during the interview can be used, anonymously, in presentations or articles. ☐ ☐

7. I agree to keep a diary about using technology for social contact. ☐ ☐

8.I have read and understood the arrangements for storage and handling of information given as described in the information sheet. ☐ ☐

9. I agree to take part in the above study. ☐ ☐

_____	_____	_____
Name	Signature	Date
_____	_____	_____
Researcher	Signature	Date

APPENDIX 2.i

Meanings that Extra Care tenants attribute to using the internet for social contact; a phenomenological study.

Interview Schedule

First Interview: One-to-One in-depth interview with participants using technology including the internet for social contact.

Purpose: To explore the participant's experience of using technology for social contact in an Extra Care housing scheme and their initial thoughts about the role of internet use in this context. The particular nature of living in an Extra Care scheme will be addressed. The researcher will also ask the participant about any difficulties with internet use and check whether the participant is willing to keep a diary about using technology for social contacts.

Venue: A quiet venue as free from distractions as possible.

Preparing for the Interview: Introductions, participant thanked for taking part, reminded of the subject of the research and purpose of the interview. Brief explanation of the format of the interview and participant's right to end the interview at any time. Participant given the opportunity to ask any questions and advised how to contact the interviewer or supervisor afterwards, if they wish. Participant confidentiality, anonymity and data storage measures confirmed. Process consent established. Researcher requests permission to record the interview or take notes.

Conducting the Interview: A flexible approach will be adopted and the tenant will determine the duration of the discussion (up to one hour). The questions are a starting point for discussion to encourage the tenants to reflect on the subject. The schedule may be adapted and questions may be rephrased or omitted on the basis of participants' responses.

1. Life in Extra Care – Establishing the setting for the Research

How long have you lived here?
How did you decide to move here?
Could you describe briefly what happens in a typical day?
Do your family / friends live round here?
How do you keep in touch with them?
How would you prefer to keep in touch?
Do you use technology for instance a telephone, mobile phone or e-mail to contact people?

Can you say how often you are in contact in a week?
What would you say were the benefits of living in an Extra Care scheme?
Are there any disadvantages?

2. The role of Internet Use

How often do you use a computer?
What do you use it for?
Have you been on the internet?
If yes, how have you used it?
How do you feel about using the internet?
Do you use it to contact people?
Have you talked to your friends/family about using the internet?
What do they think about it?
What do you think the benefits of using the internet might be?
Do you have any problems with using the internet?
If yes, what do you think might be a problem for you?
Would you like some help?

Concluding the Interview:

Thank tenant for their help. Confirm confidentiality, offer opportunity to review the transcript / suggest date for the next interview. Confirm contact details for researcher and supervisor.

Interview Schedules for the second and third interviews will be developed in the light of the results from the first interview. The second interview will be an opportunity to check and build on what was said during the first interview. However, the focus of the second interview will be on developing an understanding of the tenant's experience of internet use and their views of barriers and facilitators to successful online contact. If a diary has been kept, that will be reviewed with the tenant during the second interview. The third interview will look at continued internet use and provide opportunities for the participant to reflect on their past and visualise their future use of the internet for social contact. It will take place approximately one month after the second interview.

APPENDIX 2.ii

Meanings that Extra Care tenants attribute to using the internet for social contact; a phenomenological study.

Interview Schedule

Second Interview: One-to-one in-depth interview with participants who have kept a diary documenting their use of technology for social contact.

Purpose: To recap on the first interview, give the participant an opportunity to raise any queries arising from the interview and to clarify any points which were unclear to the researcher. Then, to explore the participant's day to day experience of using technology for social contact, working chronologically through the participant's diary about using technology for social contact.

Venue: A quiet venue as free from distractions as possible.

Preparing for the Interview: Participant thanked for taking part, reminded of the subject of the research and purpose of the interview. Brief explanation of the format of the interview and participant's right to end the interview at any time. Participant given the opportunity to ask any questions and advised how to contact the interviewer or supervisor afterwards, if they wish. Participant confidentiality, anonymity and data storage measures confirmed. Process consent established. Researcher requests permission to record the interview or take notes.

Conducting the Interview: A flexible approach will be adopted and the participant will determine the duration of the discussion (up to one hour). The second interview is an opportunity to check and build on what was said during the first interview, therefore the discussion will vary between participants. Questions following up the first interview are a starting point for discussion, to encourage the participant to reflect on the subject. Having completed the follow-up from Interview 1, researcher and participant talk through the participant's diary entries, working chronologically through the diary, with the researcher asking for clarification of any unclear entries.

The schedule may be adapted and questions may be added, rephrased or omitted on the basis of the participants' responses. The focus of the second interview is on developing an understanding of the participant's day to day experience of their internet use and their views of barriers and facilitators to successful social contact online.

Thank you for keeping the diary.
How have things gone for you since our first interview?
(Individual issues raised and discussed)
If not answered above…How are you getting on with the computer/tablet?
What do you like about using the internet?
Are you having any problems using the internet?
If appropriate….Is anyone helping you with it?
Is there anything else (if appropriate) that you find helps you?
Can we look through your diary entries?
Discussion of diary entries, reviewed chronologically with queries and clarifications, as appropriate.
What would you like to do next with the computer/tablet?

Concluding the Interview: Participant thanked for keeping the diary and taking the time to discuss it. Confirm confidentiality, offer opportunity to review the transcript and suggest date for the next interview. Confirm contact details for researcher and supervisor.

APPENDIX 2.iii

Meanings that Extra Care tenants attribute to using the internet for social contact; a phenomenological study.

Interview Schedule

Third Interview: Final one-to-one in-depth semi-structured interview with participants who have completed two earlier interviews and kept a diary of their use of technology for social contact.

Purpose: To recap on the earlier interviews, giving the participant an opportunity to raise any queries arising from the previous interviews and to clarify any points which were unclear to the researcher. Then, to explore the participant's reflections on and meanings attributed to their experience of using technology for social contact.

Venue: A quiet venue as free from distractions as possible.

Preparing for the Interview: Participant thanked for taking part, reminded of the subject of the research and purpose of the interview. Brief explanation of the format of the interview and participant's right to end the interview at any time. Participant given the opportunity to ask any questions and advised how to contact the interviewer or supervisor afterwards, if they wish. Participant confidentiality, anonymity and data storage measures confirmed. Process consent established. Researcher requests permission to record the interview or take notes.

Conducting the Interview: A flexible approach will be adopted and the participant will determine the duration of the discussion (up to one hour). The third interview is an opportunity to check and build on what was said during the first and second interviews. Researcher to ask the participant to reflect on the subject, thinking about their past and visualising their future use of the internet for social contact.

The schedule may be adapted and questions may be added, rephrased or omitted on the basis of participants' responses.

This is the last interview.
It's quite a few months since the first interview. How do you feel about using the internet now? (This is a repeat of a question asked in the first interview).
(If not answered by question above…) Since our first interview, has anything changed about the way you use the internet?
What are you using it for?
(If a new application is being used…) Why did you fancy doing that?

Has using the internet changed anything about keeping in touch with your family and friends?
How do you think using the internet compares with sending texts or using the mobile phone or landline?
(if not answered above…)Now you are using the internet to contact people, has that made a difference for you?
How do you think you will use the internet in future?
Thinking back over this interview and the earlier interviews, is there anything you would like to ask me about them?

Concluding the Interview: Participant thanked for their help in keeping the diary and participating in all three interviews. Confirm confidentiality, offer opportunity to review the transcript and/or receive a copy of the finished research. Confirm contact details for researcher and supervisor.

Appendix 3.i

Written Diary - Advice for Participants

Research into Using Technology for Social Contact.

Thank you for agreeing to keep a diary for 2 weeks. The aim of the diary is to record how you use technology to contact people. (By technology I mean a telephone, mobile phone, computer, tablet or iPad.)

How often do I need to write?

You are asked to write your diary each day for 14 days. Do not worry if you don't feel able to write something each day. If you forget to write something down, just add it the next time you are writing your diary.

Please write the date at the top of each diary entry.

What should I record in the diary?

Please use the following questions as a guide.

What did you do? phone call, texting, sending an e-mail, Skype call

What equipment did you use? telephone, mobile phone, laptop, PC, tablet, iPad.

Who were you contacting? family member, friend, business or shop, public service (library/doctor/hospital). There is no need to say who you contacted, just the type of contact.

Why did you contact them? for information, appointment, for a chat, ordering goods from them. (There is no need to give more details.)

Please include any comments you would like to make about using technology to contact people.

Examples of diary entries

> *10th July 2013*
>
> *Laptop used. E-mail sent to a friend arranging to meet up.*
> *Mobile phone used. Text sent to family member about exams. It took a long time to send the text because the letters on the keyboard are very small.*

11th July 2013

Telephone used to call the council about rubbish outside.

You can say more than this, if you would like to make some comments.

What about spelling mistakes in the diary?

Don't worry about your handwriting, spelling or grammar; just write down what you want to say.

Is my diary confidential?

Your diary will be securely stored in a locked cabinet while I have it. If any of your diary entries are used in a report, I will make sure that you cannot be identified. If you would like your diary back, I will return it to you when I have collected the information from it. Otherwise it will be destroyed 2 years after the study finishes.

If you want help or advice?

If you have any concerns or questions about keeping the diary, please

contact me on

Tel: 01325 718362 or jill.wales@northumbria.ac.uk

I will contact you after one week to find out how you are getting on.

I will also collect your diary after two weeks and arrange a follow up interview to talk it over.

Appendix 4.i - Participants' Wordles

Image 1 - Kathleen's Wordle

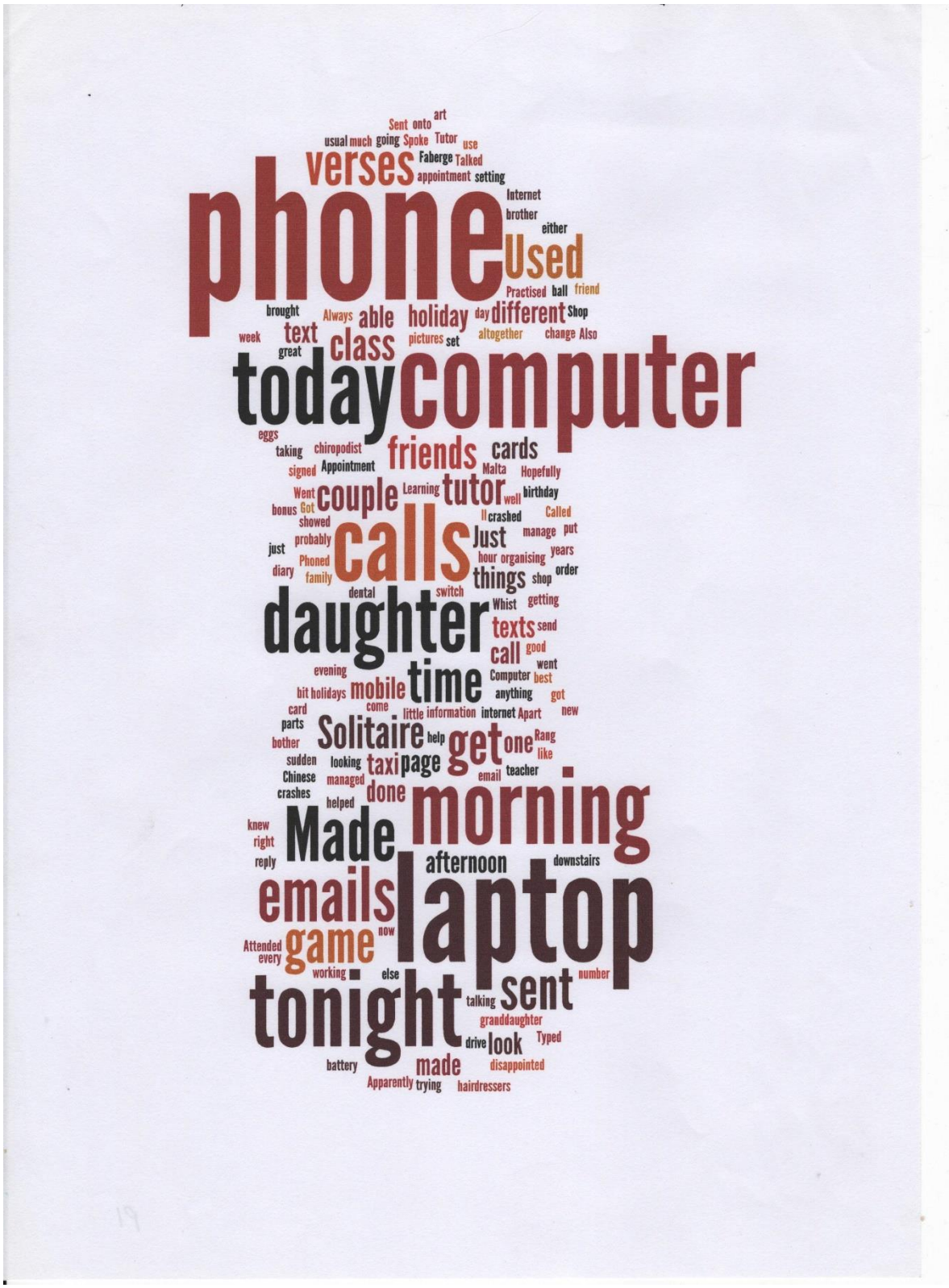


Image 2 – Freda's Wordle

Image 3 - Teresa's Wordle

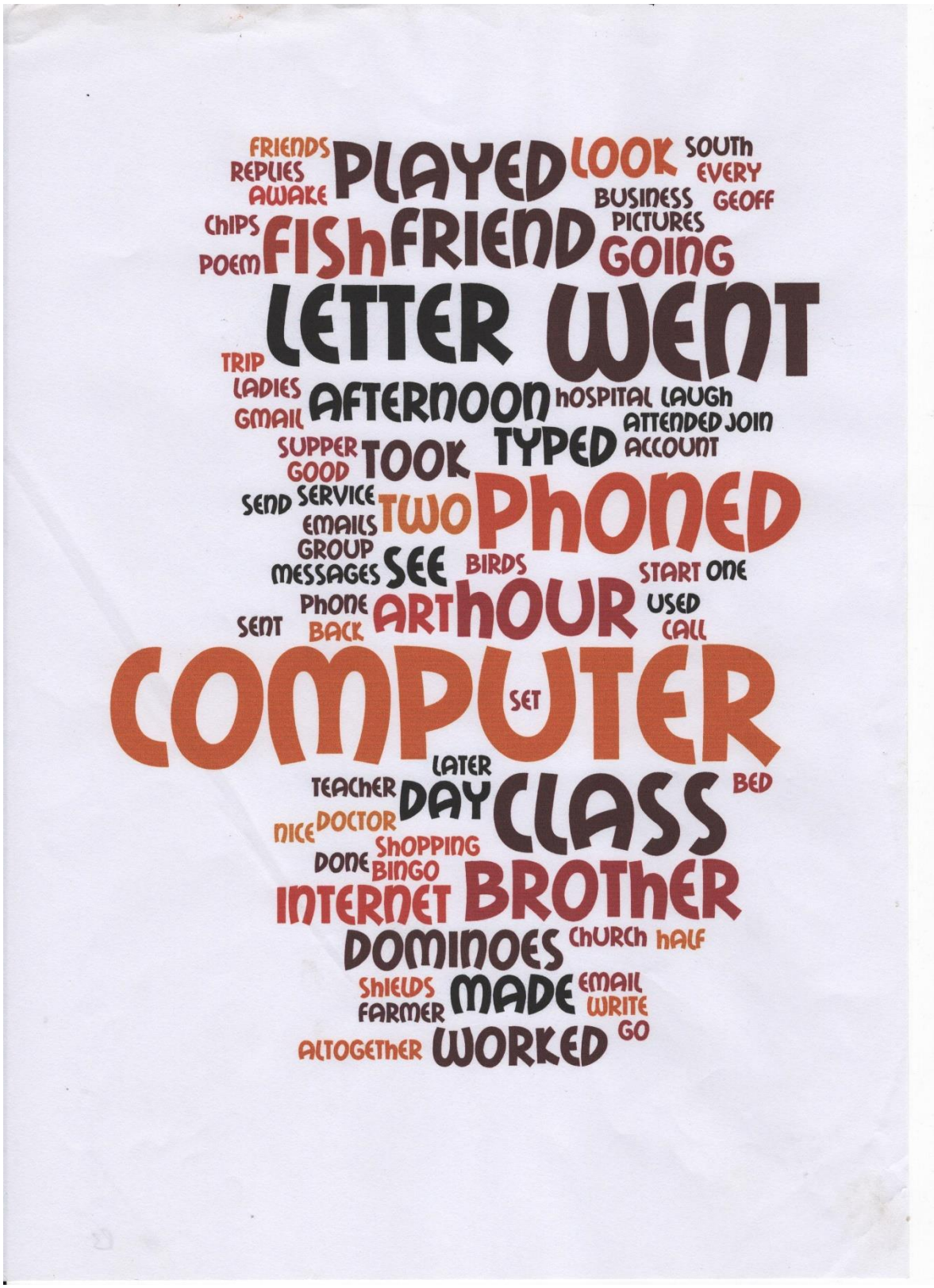


Image 4 – Alan's Wordle

Image 5 – Denise's Wordle

Image 6 – Lisa's Wordle

Image 7 – Pauline's Wordle

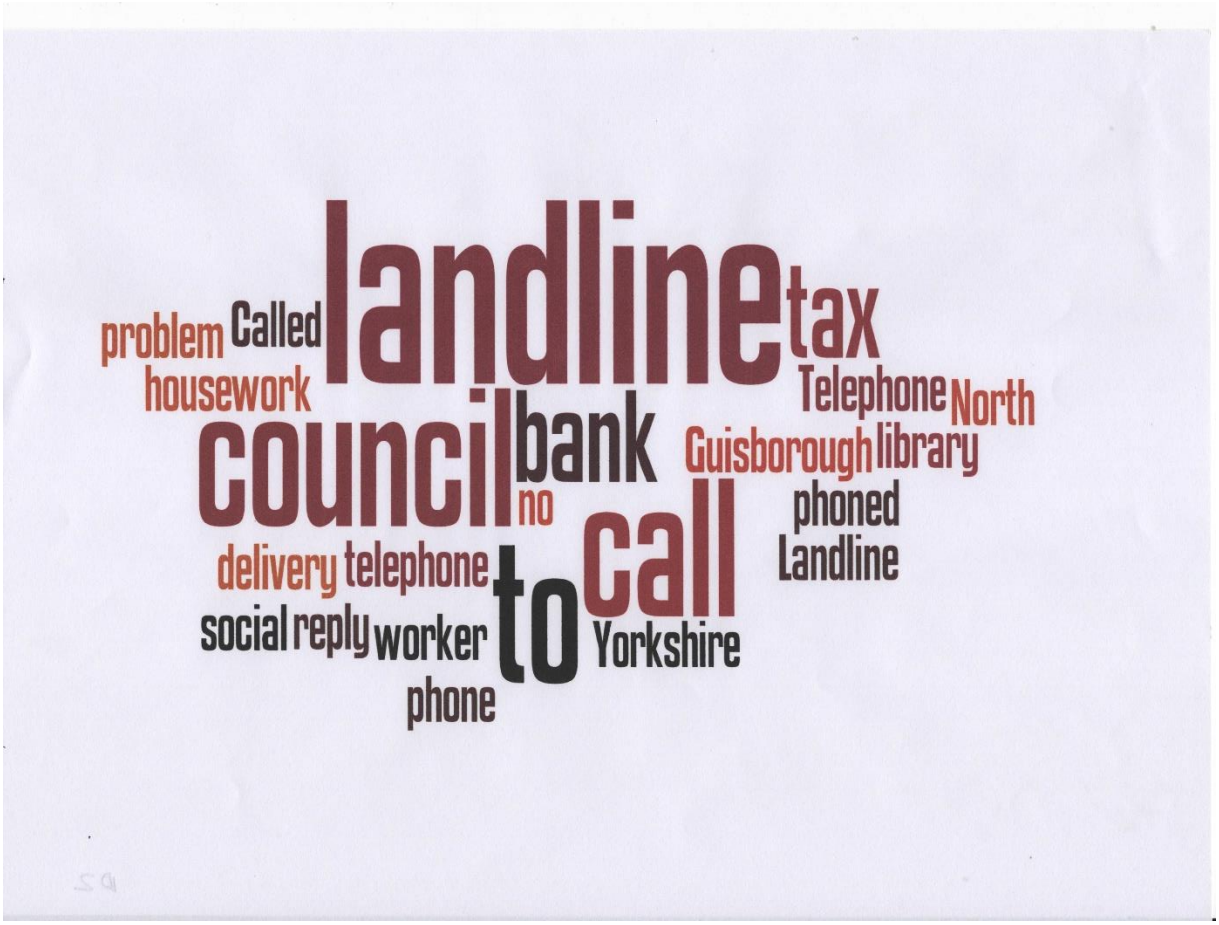
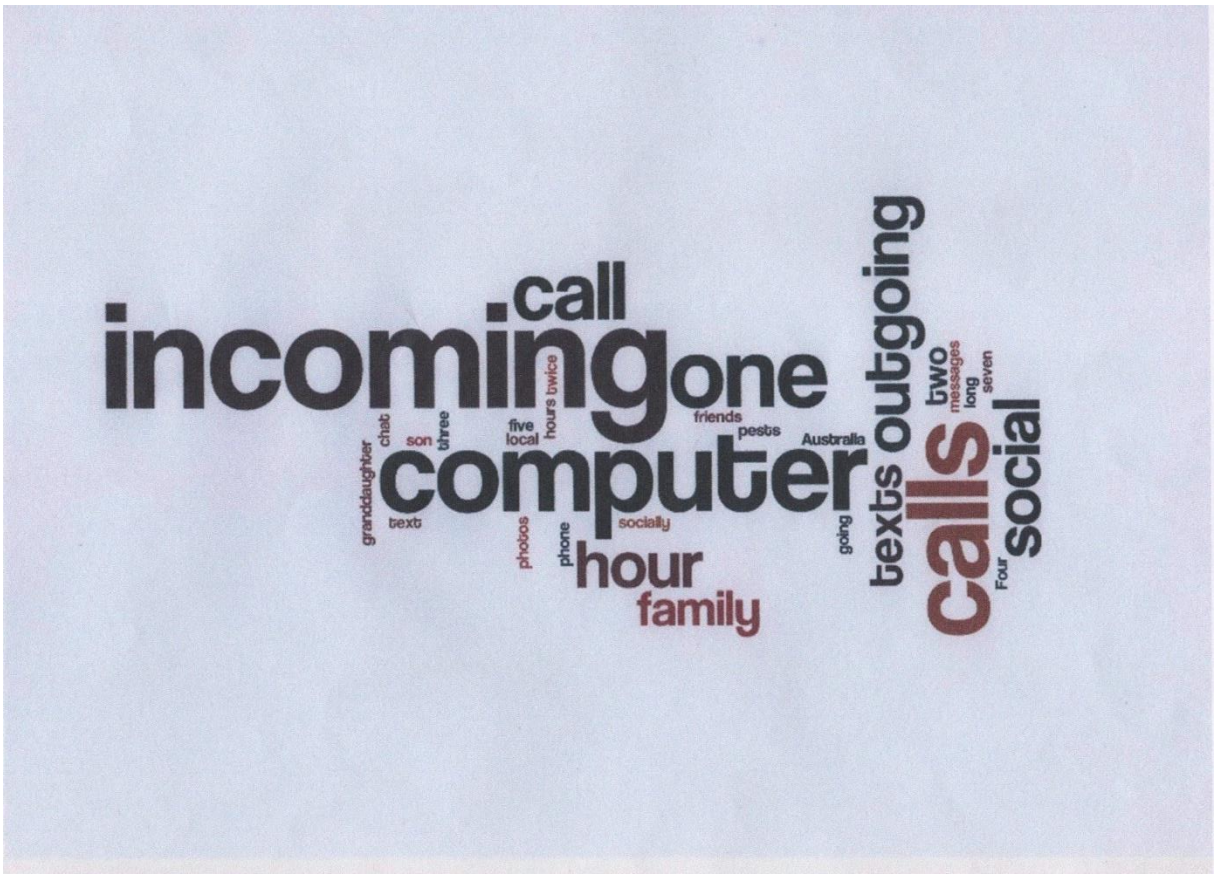


Image 8 – Olga's Wordle



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